DOCUMENT RESUME

ED 287 695 SE 048 650

TITLE Early Release of Summary Statistics on Academic Science/Engineering Resources.
INSTITUTION National Science Foundation, Washington, D.C. Div. of Science Resources Studies.
PUB DATE Oct 87
NOTE 38p.; Contains some small type which may not reproduce well. For the 1983 report, see ED 238 716.
PUB TYPE Reports - Descriptive (141) -- Statistical Data (110)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *College Science; *Degrees (Academic); Educational Finance; *Engineering Education; *Expenditures; *Federal Aid; Females; *Graduate Study; Higher Education; Minority Groups; *National Surveys; Research and Development; Research Universities; Science and Society
IDENTIFIERS *National Science Foundation

ABSTRACT

This document contains a set of tabulations that are related to the science and engineering resources of universities and colleges. The tabulations were derived from three National Science Foundation (NSF) surveys that are conducted annually by NSF's Division of Science Resources Studies. Data presented in these tables are assembled from the most recently completed surveys and represent the latest totals available as of September 1987. The three surveys include different proportions of the higher education universe, depending on the degree of concentration of the variables being examined. The tabulations were based on surveys dealing with: (1) the expenditures of institutions granting science/engineering graduate degrees and schools with $50,000 or more in separately budgeted research and development expenditures; (2) the federal support received by all institutions of higher education in the United States; and (3) graduate students from institutions granting science/engineering degrees and their affiliated health professional schools. (TW)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED287695

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
NSF
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

EARLY RELEASE OF SUMMARY STATISTICS ON ACADEMIC SCIENCE/ENGINEERING RESOURCES

Prepared by the
Universities and Colleges
Studies Group
Division of Science Resources Studies
National Science Foundation
(202) 634-4673

October 1987

SE 048 650

BEST COPY AVAILABLE

NATIONAL SCIENCE FOUNDATION
Washington, D.C. 20550

Dear Colleague:

Enclosed is a selected set of tabulations titled, "Early Release of Summary Statistics" that is related to the science and engineering (S/E) resources of universities and colleges. The tabulations were derived from three National Science Foundation (NSF) surveys conducted annually by the Division of Science Resources Studies. They are those most often requested and have been compiled for your information and analyses.

Selected data items for specific graduate institutions are also available on computer-generated Institutional Profiles and may be obtained by calling Richard Bennof on (202) 634-4636.

If you need further information, please do not hesitate to contact me at (202) 634-4673.

Sincerely,

James B. Hoehn

James B. Hoehn
Study Director
Universities and Colleges Studies Group
Division of Science Resources Studies

SUMMARY STATISTICS ON ACADEMIC SCIENCE/ENGINEERING RESOURCES

The data presented in this summary are being released in advance of their publication and are derived from three surveys of academic science/engineering activities conducted annually by the National Science Foundation's Division of Science Resources Studies:

1. Survey of Scientific and Engineering Expenditures at Universities and Colleges, FY 1986 (the *Expenditures Survey*): Tables 1-8;

2. Survey of Federal Support to Universities, Colleges, and Selected Nonprofit Institutions, FY 1986 (the *Federal Support Survey*): Tables 9-14; and

3. Survey of Graduate Science and Engineering Students and Postdoctorates, Fall 1986 (the *Graduate Student Survey*): Tables 15-24.

Note that the data provided in tables 1-14 cover fiscal years, while data in tables 15-24 are as of the Fall of each year. In the Expenditures and Graduate Student Surveys, data are submitted by institutions of higher education; data on Federal obligations to academic institutions are collected directly from the major funding agencies.

Data presented in these tables are assembled from the most recently completed surveys and represent the latest totals available as of September 1987. Since both current-year and prior-year data are regularly reviewed and updated in consultation with agency and institutional respondents, the figures are subject to revision in subsequent years. Note that in these statistical tables, N/A means "not available," while N.E.C. means "not elsewhere classified."

The three surveys include different proportions of the higher-education universe, depending on the degree of concentration of the variables being examined. Survey coverage is as follows (numbers of institutions shown represent averages for the last eight survey cycles, excluding the 1978/79 cycle when the Expenditures and Graduate Student Surveys were mailed to doctorate-granting institutions only):

1. *Expenditures Survey*: Institutions granting science/engineering graduate degrees and schools with $50,000 or more in separately budgeted R&D expenditures (about 550 institutions and their associated FFRDCs). Data for FY 1984 through FY 1986 are based on a sample of about 400 institutions.

2. *Federal Support Survey*: All institutions of higher education in the United States (about 2,400 institutions, their system offices, and their associated FFRDCs).

3. *Graduate Student Survey*: Institutions granting science/engineering degrees and their affiliated health professional schools (about 600 institutions). Data for Fall 1984 through 1986 are based on a sample of about 400 institutions.

For further information on the academic science/engineering surveys' data availability, please contact NSF staff responsible for each survey system as listed below.

Expenditures Survey: Marge Machen (202) 634-4673
Federal Support Survey: Richard Bennof (202) 634-4636
Graduate Student Survey: J.G. Huckenpahler (202) 634-4787

ACADEMIC SCIENCE/ENGINEERING-SURVEY DISKETTES

The National Science Foundation (NSF) offers a free diskette service to those who wish to obtain data resulting from the most recent surveys conducted by the Division of Science Resources Studies.

Each data set is released on 5 1/4" diskettes suitable for use on IBM-compatible personal computers and is provided to the user upon receipt of the correct number of blank diskettes. All data sets contain the detailed statistical tables, technical notes, and a table of contents. Data sets are prepared in either standard ASCII format (including a table-printing program) or in LOTUS 1-2-3 (Release 1A) format. Some data sets are available in both formats. For further information concerning diskettes, contact NSF DISKETTE SERVICE, RDS Systems, Inc., 6110 Executive Blvd., Suite 605, Rockville, Maryland 20852.

ELECTRONIC BULLETIN BOARD

Remote access to Science Resources Studies data is available from the Electronic Bulletin Board via any personal computer equipped with a modem. It contains comprehensive statistical tabulations, brief narrative reports on current studies, and announcements of available data sets. Textual BULLETINS can be viewed while on the Board, but tabulations or FILES must be downloaded to the user's computer for viewing. The telephone number is (202) 634-1764. The Board is capable of handling 300, 1200, or 2400 Baud, with 8 data bits, No parity, 1 stop bit, and XMODEM protocol. For more information and help dial (202) 634-4250.

LIST OF TABLES

Expenditures

1. R&D expenditures at universities and colleges by source of funds, character of work, and science/engineering field: fiscal years 1979-86

2. Federally financed R&D expenditures at universities and colleges by character of work and science/engineering field: fiscal years 1979-86.

3. R&D expenditures at doctorate-granting institutions by source of funds, character of work, and science/engineering field: fiscal years 1979-86.

4. R&D expenditures at doctorate-granting institutions by geographic division, state, and source of funds: fiscal year 1986.

5. Total and federally financed R&D expenditures at universities and colleges: fiscal years 1983-1986.

6. Industry-sponsored R&D expenditures at universities and colleges: fiscal years 1979-86.

7. Current fund expenditures for research equipment at universities and colleges by science/engineering field and source of funds: fiscal years 1981 and 1985-86.

8. Capital expenditures at universities and colleges by science/engineering field and source of funds: fiscal years 1979-86.

Federal Support

9. Federal obligations to universities and colleges by type of activity: fiscal years 1963-86.

10. Federal obligations to the 100 universities and colleges receiving the largest amounts by type of activity: fiscal year 1986.

11. Federal obligations for research and development to the 100 universities and colleges receiving the largest amounts by agency: fiscal year 1986.

12. Federal obligations to universities and colleges for research and development by geographic division and state: fiscal years 1979-86.

13. Federal obligations to universities and colleges for research and development by detailed field: fiscal years 1979-86.

14. Federal obligations to universities and colleges by agency and type of activity: fiscal year 1986.

Graduate Students and Postdoctorates

15. Science/engineering graduate students in all institutions by highest degree granted and field: 1975-86.

16. Male science/engineering graduate students in all institutions by field: 1980-86.

17. Female science/engineering graduate students in all institutions by field: 1980-86.

18. Science/engineering graduate students in all institutions by field, citizenship, and racial/ethnic background: 1980-86.

19. Full-time science/engineering graduate students in all institutions by type and source of major support: 1980-86.

20. Science/engineering graduate students in doctorate-granting institutions by field: 1980-86.

21. Science/engineering graduate students in doctorate-granting institutions by geographic distribution: 1980-86.

22. Graduate science/engineering enrollment in doctorate-granting institutions, ranked by total graduate science/engineering enrollment: 1981-86.

23. Graduate science/engineering enrollment in doctorate-granting institutions by major field, ranked by total graduate science/engineering enrollment: 1986.

24. Science/engineering postdoctorates in doctorate-granting institutions by field: 1980-86.

TABLE 1. — R&D EXPENDITURES AT UNIVERSITIES AND COLLEGES BY SOURCE OF FUNDS, CHARACTER OF WORK, AND SCIENCE/ENGINEERING FIELD: FISCAL YEARS 1979–86

(DOLLARS IN THOUSANDS)

SOURCE, CHARACTER, AND FIELD	1979	1980	1981	1982	1983	1984	1985	1986
TOTAL	5,361,408	6,060,629	6,809,552	7,266,122	7,798,179	8,508,380	9,524,293	10,718,402
SOURCE OF FUNDS:								
FEDERAL GOVERNMENT	3,595,271	4,097,011	4,556,889	4,746,803	4,952,731	5,385,678	5,997,773	6,633,347
STATE AND LOCAL GOVERNMENTS	470,073	491,069	544,202	609,043	624,442	682,843	729,411	902,963
INDUSTRY	194,186	236,967	290,741	333,455	377,930	460,641	542,849	667,362
INSTITUTIONAL FUNDS	728,298	827,116	972,435	1,077,678	1,255,780	1,349,812	1,556,562	1,774,421
ALL OTHER SOURCES	373,580	408,466	445,285	499,143	587,296	629,406	697,697	740,309
CHARACTER OF WORK:								
BASIC RESEARCH	3,612,278	4,026,932	4,570,848	4,850,858	5,264,841	5,637,923	6,386,656	7,243,658
APPLIED RESEARCH AND DEVELOPMENT	1,749,130	2,033,697	2,238,704	2,415,264	2,533,338	2,870,457	3,137,637	3,474,744
FIELD:								
ENGINEERING, TOTAL 1/	768,407	864,924	960,677	1,025,513	1,110,811	1,207,104	1,386,717	1,609,093
AERONAUTICAL AND ASTRONAUTICAL	-	46,285	45,481	60,226	65,009	66,344	75,716	86,519
CHEMICAL	-	67,557	83,207	83,548	90,767	96,199	108,927	125,122
CIVIL	-	88,641	108,174	108,711	109,921	133,692	147,428	171,012
ELECTRICAL	-	184,050	193,080	223,862	259,283	291,795	336,932	398,203
MECHANICAL	-	146,163	149,128	142,171	149,881	176,682	205,625	224,206
OTHER, N.E.C.	-	332,228	381,607	406,995	435,950	442,391	512,088	604,031
ALL SCIENCES, TOTAL	4,593,001	5,195,705	5,848,875	6,240,609	6,687,368	7,301,276	8,137,576	9,109,309
PHYSICAL SCIENCES	601,904	677,293	764,673	822,584	897,099	991,917	1,133,913	1,261,376
ASTRONOMY	48,459	58,740	67,337	73,237	74,177	80,457	91,049	96,335
CHEMISTRY	206,421	243,982	283,899	308,091	334,663	367,843	411,615	460,084
PHYSICS	292,033	322,230	356,859	365,897	414,165	469,403	550,045	622,296
OTHER, N.E.C.	54,991	52,341	56,578	75,359	74,094	74,215	81,204	82,661
ENVIRONMENTAL SCIENCES 1/	452,915	509,038	548,920	557,817	618,962	649,601	705,357	774,177
ATMOSPHERIC	-	67,459	78,257	85,443	97,660	102,875	109,549	124,826
EARTH SCIENCES	-	188,226	189,692	195,507	216,159	225,525	250,534	261,849
OCEANOGRAPHY	-	171,668	187,463	197,701	223,994	238,157	260,306	275,524
OTHER, N.E.C.	-	81,685	93,508	79,166	81,149	83,044	84,968	111,978
MATHEMATICAL SCIENCES	78,477	78,667	88,793	98,568	108,038	124,398	129,799	152,204
COMPUTER SCIENCES	97,921	114,196	132,884	149,259	175,236	222,480	279,181	315,360
LIFE SCIENCES	2,832,523	3,217,658	3,670,596	3,969,593	4,233,143	4,617,226	5,155,422	5,746,125
AGRICULTURAL SCIENCES	602,485	679,880	772,434	844,040	895,520	930,245	1,028,549	1,122,363
BIOLOGICAL SCIENCES	914,806	1,030,429	1,186,333	1,286,548	1,408,240	1,555,330	1,697,690	1,832,910
MEDICAL SCIENCES	1,237,556	1,414,345	1,599,203	1,717,072	1,801,576	1,989,803	2,259,525	2,578,240
OTHER, N.E.C.	77,676	93,004	112,626	121,933	127,807	141,848	169,658	212,612
PSYCHOLOGY	100,531	111,290	128,328	132,322	138,505	146,884	162,047	180,453
SOCIAL SCIENCES	295,138	341,445	370,351	358,286	354,348	372,337	389,790	459,303
ECONOMICS	83,089	90,158	99,496	95,590	96,476	109,215	115,789	132,377
POLITICAL SCIENCE	45,431	55,395	56,315	61,371	55,545	56,317	60,738	68,074
SOCIOLOGY	74,641	88,556	94,658	80,252	78,327	74,626	78,643	88,311
OTHER, N.E.C.	91,977	107,336	119,882	121,073	124,000	132,178	134,620	170,542
OTHER SCIENCES, N.E.C.	133,592	146,118	144,330	152,180	162,037	176,433	182,066	220,311

1/ DETAIL NOT SEPARATELY AVAILABLE PRIOR TO 1980.

SOURCE: NATIONAL SCIENCE FOUNDATION, SRS

TABLE 2. -- FEDERALLY FINANCED R&D EXPENDITURES AT UNIVERSITIES AND COLLEGES BY CHARACTER OF WORK AND SCIENCE/ENGINEERING FIELD: FISCAL YEARS 1979-86

(DOLLARS IN THOUSANDS)

CHARACTER AND FIELD	1979	1980	1981	1982	1983	1984	1985	1986
TOTAL	3,595,271	4,097,011	4,556,889	4,746,803	4,952,731	5,385,678	5,997,773	6,633,347
CHARACTER OF WORK:								
BASIC RESEARCH	2,571,744	2,854,095	3,246,554	3,391,563	3,533,467	3,780,209	4,251,485	4,747,653
APPLIED RESEARCH AND DEVELOPMENT	1,023,527	1,242,916	1,310,335	1,355,240	1,419,264	1,605,469	1,746,288	1,885,694
FIELD:								
ENGINEERING, TOTAL 1/	526,364	595,446	662,283	697,943	737,084	778,118	856,402	968,474
AERONAUTICAL AND ASTRONAUTICAL	-	35,610	35,262	47,889	51,902	52,183	59,719	67,345
CHEMICAL	-	46,057	55,162	49,615	51,977	54,289	57,620	66,135
CIVIL	-	58,920	67,906	58,996	58,060	74,791	81,202	91,517
ELECTRICAL	-	139,621	145,390	173,799	191,871	207,267	228,574	265,885
MECHANICAL	-	99,774	102,976	97,606	101,276	117,734	132,106	144,529
OTHER, N.E.C.	-	215,464	255,587	270,038	281,998	271,853	297,181	333,063
ALL SCIENCES, TOTAL	3,068,907	3,501,565	3,894,606	4,048,860	4,215,647	4,607,561	5,141,370	5,664,873
PHYSICAL SCIENCES	490,680	554,819	618,053	648,917	697,447	778,610	882,504	975,516
ASTRONOMY	36,245	44,441	47,828	51,675	50,370	53,111	60,112	64,009
CHEMISTRY	156,516	189,427	216,052	230,302	247,652	277,957	307,214	337,913
PHYSICS	252,518	279,890	308,549	306,025	339,909	388,188	454,993	509,574
OTHER, N.E.C.	45,401	41,061	45,624	60,915	59,516	59,353	60,186	64,021
ENVIRONMENTAL SCIENCES 1/	329,154	372,533	391,727	391,159	426,847	450,967	477,550	520,137
ATMOSPHERIC	-	55,524	58,690	68,297	75,943	82,107	86,431	99,485
EARTH SCIENCES	-	131,272	127,927	126,996	135,808	139,410	152,825	150,942
OCEANOGRAPHY	-	132,726	145,923	153,574	171,352	183,582	191,791	207,095
OTHER, N.E.C.	-	53,011	59,187	42,292	43,744	45,868	46,504	62,615
MATHEMATICAL SCIENCES	60,431	61,114	67,672	71,837	76,397	91,064	95,691	112,364
COMPUTER SCIENCES	69,192	76,982	93,452	106,918	127,697	161,555	193,154	227,428
LIFE SCIENCES	1,818,779	2,094,873	2,362,586	2,492,608	2,563,362	2,796,038	3,140,747	3,439,947
AGRICULTURAL SCIENCES	184,676	211,897	233,656	254,756	259,663	270,074	298,377	298,075
BIOLOGICAL SCIENCES	664,675	763,373	865,465	920,822	983,318	1,087,778	1,192,986	1,278,995
MEDICAL SCIENCES	914,905	1,056,561	1,187,179	1,238,622	1,242,736	1,349,158	1,547,246	1,738,382
OTHER, N.E.C.	54,523	63,042	76,286	78,408	77,645	89,028	102,138	124,495
PSYCHOLOGY	72,257	81,193	92,457	89,086	90,599	98,379	107,480	118,449
SOCIAL SCIENCES	155,074	181,627	186,978	161,795	147,573	144,892	154,647	166,948
ECONOMICS	40,026	43,430	44,508	41,199	37,072	41,953	42,450	42,878
POLITICAL SCIENCE	20,561	23,676	23,362	22,521	19,926	18,305	20,073	19,731
SOCIOLOGY	47,144	57,140	56,353	45,965	42,405	38,559	40,256	43,685
OTHER, N.E.C.	47,343	57,381	62,755	52,110	48,170	46,076	51,867	60,655
OTHER SCIENCES, N.E.C.	73,340	78,424	81,681	86,540	85,725	86,056	89,597	104,083

1/ DETAIL NOT SEPARATELY AVAILABLE PRIOR TO 1980.

SOURCE: NATIONAL SCIENCE FOUNDATION, SRS

TABLE 3. -- R&D EXPENDITURES AT DOCTORATE-GRANTING INSTITUTIONS
BY SOURCE OF FUNDS, CHARACTER OF WORK, AND SCIENCE/ENGINEERING FIELD:
FISCAL YEARS 1979-86

(DOLLARS IN THOUSANDS)

SOURCE, CHARACTER, AND FIELD	1979	1980	1981	1982	1983	1984	1985	1986
TOTAL	5,271,643	5,958,867	6,695,996	7,147,677	7,675,992	8,367,143	9,381,822	10,570,638
SOURCE OF FUNDS:								
FEDERAL GOVERNMENT	3,534,215	4,030,009	4,482,252	4,671,543	4,876,393	5,292,286	5,898,245	6,529,440
STATE AND LOCAL GOVERNMENTS	461,534	481,554	534,047	595,452	610,737	670,128	720,380	892,923
INDUSTRY	190,733	232,758	284,685	326,984	370,897	450,895	534,199	657,362
INSTITUTIONAL FUNDS	716,069	813,577	958,595	1,063,399	1,239,070	1,336,886	1,542,089	1,759,384
ALL OTHER SOURCES	369,092	401,169	436,417	490,299	578,895	616,948	686,909	731,529
CHARACTER OF WORK:								
BASIC RESEARCH	3,561,649	3,965,960	4,501,674	4,773,456	5,182,585	5,545,843	6,284,154	7,143,480
APPLIED RESEARCH AND DEVELOPMENT	1,709,994	1,992,907	2,194,322	2,374,221	2,493,407	2,821,300	3,097,668	3,427,158
FIELD:								
ENGINEERING, TOTAL 1/	761,142	857,043	952,823	1,017,616	1,101,215	1,189,731	1,367,309	1,586,389
AERONAUTICAL AND ASTRONAUTICAL	-	45,742	44,919	59,399	64,242	64,445	73,505	83,964
CHEMICAL	-	66,876	82,955	83,334	90,556	95,816	108,615	124,721
CIVIL	-	86,703	106,115	106,812	107,750	128,532	142,085	164,067
ELECTRICAL	-	183,219	191,922	222,929	257,884	289,291	313,193	392,125
MECHANICAL	-	145,125	147,730	140,933	148,225	174,592	202,379	220,840
OTHER, N.E.C.	-	329,378	379,182	404,209	432,558	437,055	507,532	600,672
ALL SCIENCES, TOTAL	4,510,501	5,101,824	5,743,173	6,130,061	6,574,777	7,177,412	8,014,513	8,984,249
PHYSICAL SCIENCES	585,227	659,047	746,336	802,978	877,761	971,894	1,110,362	1,237,423
ASTRONOMY	47,969	58,087	66,746	72,662	73,380	77,492	89,135	94,915
CHEMISTRY	198,788	234,359	272,932	296,122	322,876	357,963	398,019	446,534
PHYSICS	286,738	316,094	350,797	359,767	408,201	462,572	542,391	614,402
OTHER, N.E.C.	51,732	50,507	55,861	74,427	73,304	73,867	80,817	81,572
ENVIRONMENTAL SCIENCES 1/	443,531	496,188	532,947	542,495	601,828	629,264	683,367	753,412
ATMOSPHERIC	-	65,236	75,223	83,366	95,407	102,692	108,698	124,001
EARTH SCIENCES	-	182,457	183,906	189,647	208,980	219,468	246,331	257,038
OCEANOGRAPHY	-	169,612	183,583	194,726	220,801	228,918	250,416	266,944
OTHER, N.E.C.	-	78,883	90,235	74,756	76,640	78,186	77,922	105,429
MATHEMATICAL SCIENCES	77,141	76,759	86,198	94,813	104,364	120,630	127,627	149,325
COMPUTER SCIENCES	95,276	111,415	130,880	146,144	172,783	220,041	276,340	312,093
LIFE SCIENCES	2,802,489	3,184,002	3,631,982	3,926,994	4,189,394	4,567,886	5,105,370	5,693,854
AGRICULTURAL SCIENCES	591,631	666,756	756,048	825,681	874,379	904,151	1,001,877	1,095,091
BIOLOGICAL SCIENCES	899,789	1,015,719	1,169,329	1,266,783	1,389,272	1,537,673	1,678,960	1,815,085
MEDICAL SCIENCES	1,234,837	1,410,704	1,596,507	1,715,106	1,799,943	1,986,219	2,256,896	2,574,670
OTHER, N.E.C.	76,232	90,823	110,098	119,424	125,800	139,843	167,637	209,008
PSYCHOLOGY	93,944	106,864	122,134	128,579	134,305	145,289	160,393	178,679
SOCIAL SCIENCES	283,183	324,129	350,331	339,178	336,155	347,777	371,731	441,396
ECONOMICS	80,780	87,292	96,646	93,999	94,828	104,208	113,308	129,696
POLITICAL SCIENCE	44,284	53,331	54,309	59,328	53,696	54,804	59,291	66,806
SOCIOLOGY	72,059	83,331	86,364	73,373	71,218	66,442	70,318	81,717
OTHER, N.E.C.	86,060	100,175	113,012	112,478	116,413	122,323	128,814	163,177
OTHER SCIENCES, N.E.C.	129,710	143,420	142,365	148,880	158,187	174,631	179,323	218,067

1/ DETAIL NOT SEPARATELY AVAILABLE PRIOR TO 1980.

SOURCE: NATIONAL SCIENCE FOUNDATION, SRS

TABLE 4. -- R&D EXPENDITURES AT DOCTORATE-GRANTING INSTITUTIONS BY GEOGRAPHIC DIVISION, STATE, AND SOURCE OF FUNDS: FISCAL YEAR 1986

(DOLLARS IN THOUSANDS)

DIVISION AND STATE	TOTAL	FEDERAL GOVERNMENT	STATE AND LOCAL GOVERNMENTS	INDUSTRY	INSTITUTIONAL FUNDS	ALL OTHER SOURCES
TOTAL	10,570,638	6,529,440	892,923	657,362	1,759,384	731,529
NEW ENGLAND	993,504	719,268	22,489	72,779	92,281	86,687
CONNECTICUT	195,173	128,501	4,351	5,880	40,923	15,518
MAINE	19,315	8,584	796	2,856	5,075	2,004
MASSACHUSETTS	643,010	484,638	11,286	54,961	31,796	60,329
NEW HAMPSHIRE	42,171	29,544	3,188	1,443	4,899	3,097
RHODE ISLAND	64,136	48,153	939	4,308	6,213	4,523
VERMONT	29,699	19,848	1,929	3,331	3,375	1,216
MIDDLE ATLANTIC	1,769,079	1,140,226	92,446	121,392	239,794	175,221
NEW JERSEY	180,264	83,541	22,915	8,173	47,457	18,178
NEW YORK	1,047,184	716,460	49,270	57,381	117,301	106,772
PENNSYLVANIA	541,631	340,225	20,261	55,838	75,036	50,271
EAST NORTH CENTRAL	1,511,113	890,104	138,834	84,604	292,131	105,440
ILLINOIS	438,237	261,602	29,128	19,432	98,510	29,565
INDIANA	176,374	107,053	17,408	14,967	30,916	6,030
MICHIGAN	341,436	188,843	25,808	20,748	81,693	24,344
OHIO	288,822	177,632	20,435	18,971	43,899	27,885
WISCONSIN	266,244	154,974	46,055	10,486	37,113	17,616
WEST NORTH CENTRAL	721,525	348,524	119,670	41,778	161,422	50,131
IOWA	146,257	69,892	13,654	4,749	47,601	10,361
KANSAS	73,223	32,517	25,122	1,271	11,065	3,248
MINNESOTA	201,743	100,308	31,819	11,157	37,251	21,208
MISSOURI	186,411	102,245	11,405	18,431	42,155	12,175
NEBRASKA	69,765	28,495	15,955	4,036	18,835	2,444
NORTH DAKOTA	33,106	12,258	15,317	1,566	3,696	269
SOUTH DAKOTA	11,020	2,809	6,398	568	819	426
SOUTH ATLANTIC	1,763,627	1,123,654	178,190	108,720	289,920	63,143
DELAWARE	28,798	12,578	1,645	3,551	9,349	1,675
DISTRICT OF COLUMBIA	70,343	56,574	201	3,606	6,026	3,936
FLORIDA	235,241	112,917	10,803	22,352	74,257	14,912
GEORGIA	284,933	135,986	33,355	29,981	78,063	7,548
MARYLAND	595,121	491,551	36,095	12,969	43,996	10,510
NORTH CAROLINA	270,746	168,232	48,933	19,983	22,216	11,382
SOUTH CAROLINA	81,789	30,947	13,979	5,033	28,321	3,509
VIRGINIA	183,779	108,176	32,532	10,793	23,138	9,140
WEST VIRGINIA	12,877	6,693	647	452	4,554	531
EAST SOUTH CENTRAL	361,014	179,306	70,727	32,536	62,488	15,957
ALABAMA	132,303	69,318	22,296	10,784	22,028	7,877
KENTUCKY	65,432	24,963	11,588	8,173	19,157	1,551
MISSISSIPPI	59,701	21,878	21,853	2,995	10,937	2,038
TENNESSEE	103,578	63,147	14,990	10,584	10,366	4,491
WEST SOUTH CENTRAL	947,563	457,266	130,445	55,274	206,620	97,958
ARKANSAS	35,379	12,385	9,390	3,068	7,875	2,661
LOUISIANA	134,802	47,396	32,251	6,135	39,411	9,609
OKLAHOMA	98,963	28,919	3,680	7,310	52,130	6,924
TEXAS	678,419	368,566	85,124	38,761	107,204	78,764
MOUNTAIN	659,050	396,852	60,060	54,032	117,664	30,442
ARIZONA	160,678	76,615	8,024	14,411	53,798	7,830
COLORADO	175,760	125,715	6,762	8,766	21,968	12,549
IDAHO	23,729	9,328	7,417	2,787	4,101	96
MONTANA	26,235	9,077	7,695	2,649	6,814	0
NEVADA	22,853	12,689	1,196	3,393	3,755	1,820
NEW MEXICO	118,508	76,274	17,331	14,770	6,711	3,422
UTAH	112,624	77,833	10,471	5,477	14,270	4,573
WYOMING	18,663	9,321	1,164	1,779	6,247	152
PACIFIC	1,808,128	1,257,262	70,348	86,135	288,076	106,307
ALASKA	27,686	14,282	3,773	981	8,347	303
CALIFORNIA	1,369,799	971,393	23,921	58,559	238,602	77,324
HAWAII	57,383	35,322	18,771	508	2,064	718
OREGON	123,424	74,179	18,376	7,333	10,014	13,522
WASHINGTON	229,836	162,086	5,507	18,754	29,049	14,440
OUTLYING AREAS	36,035	16,978	9,714	112	8,988	243

SOURCE: NATIONAL SCIENCE FOUNDATION, SRS

TABLE 5. — TOTAL AND FEDERALLY FINANCED R&D EXPENDITURES AT UNIVERSITIES AND COLLEGES: FISCAL YEARS 1983-86

(DOLLARS IN THOUSANDS)

INSTITUTIONAL RANKING	TOTAL				FEDERALLY FINANCED			
	1986	1985	1984	1983	1986	1985	1984	1983
TOTAL, ALL INSTITUTIONS	10,718,402	9,524,293	8,508,380	7,798,179	6,633,347	5,997,773	5,385,678	4,952,731
1 JOHNS HOPKINS UNIV 1/	440,844	398,630	350,891	303,115E	412,714	367,053	331,859	282,386E
2 MASS INST OF TECHNOLOGY 2/	257,726	242,966	222,134	200,349	201,097	189,935	174,938	162,801
3 UNIV OF WIS-MADISON	231,099	208,425	184,190	168,282	138,784	123,989	110,704	100,026
4 CORNELL UNIVERSITY 2/	225,400	203,226	169,450	153,323	134,660	119,319	100,767	90,185
5 STANFORD UNIVERSITY 2/	223,162	199,185	174,675	157,745	192,076	172,423	149,520	135,172
6 UNIVERSITY OF MINNESOTA	201,743	173,322	158,223	151,441	100,308	87,776	79,489	79,637
7 UNIVERSITY OF MICHIGAN	187,859	163,713	155,987	132,864	118,069	106,147	99,341	84,120
8 UNIVERSITY OF WASHINGTON	186,572	163,962	146,947	133,523	141,973	135,830	119,785	108,512
9 UNIV OF CAL LOS ANGELES	168,158	149,744	132,134	113,266	121,668	109,689	96,524	83,699
10 UNIV OF CAL SAN DIEGO	161,054	145,550	140,987	147,008	128,250	115,632	115,349	123,433
TOTAL, 1ST 10 INSTS.	2,283,617	2,048,723	1,835,618	1,660,916	1,689,599	1,527,793	1,378,276	1,249,971
11 TEXAS A & M UNIVERSITY	160,938	146,381	121,227	103,219	75,936	71,346	53,201	43,813
12 UNIV OF CAL BERKELEY 2/	158,990	149,900	133,811	118,951	102,578	96,779	87,653	76,917
13 UNIV OF ILL URBANA	158,419	139,563	119,198	99,135	86,789	80,536	71,182	59,806
14 HARVARD UNIVERSITY	154,390	138,063	124,330E	118,602E	111,503	103,556	93,430	89,824
15 UNIV OF PENNSYLVANIA	152,746	130,397	121,963	113,499	105,925	92,893	89,831	80,516
16 UNIV OF CAL SAN FRANCISCO	147,785	131,348	113,404	89,247	105,694	95,615	82,822	67,035
17 PENNSYLVANIA STATE UNIV	146,270	113,196	95,061	89,767	82,412	70,099	60,444	56,875
18 COLUMBIA UNIV MAIN DIV	145,416	136,577	124,292	113,847	128,436	120,120	107,874	100,574
19 UNIV OF TEXAS AT AUSTIN	145,324	123,337	114,664	110,570	75,152	62,462	56,482	58,231
20 UNIVERSITY OF ARIZONA	124,790	105,765	94,946	89,192	61,973	51,694	47,411	44,741
TOTAL, 1ST 20 INSTS.	3,778,685	3,363,250	2,998,514	2,706,945	2,625,997	2,372,893	2,128,606	1,928,303
21 UNIV OF CAL DAVIS	123,788	114,862	105,791	98,118	48,549	47,652	45,436	43,439
22 YALE UNIVERSITY	115,879	107,245	103,711	100,269	87,407	88,922	85,909	85,205
23 OHIO STATE UNIVERSITY	112,623	103,350	87,402	83,108	56,418	53,240	46,060	43,686
24 UNIVERSITY OF GEORGIA	111,745	91,253	83,829	70,665	32,184	28,403	26,581	22,434
25 UNIV OF SOUTHERN CAL	109,844	97,282	87,278	84,395	92,906	76,425	64,239	57,976
26 UNIV OF MD COLLEGE PARK	106,701	96,484	84,442	81,504E	43,971	39,450	33,033	31,094
27 GEORGIA INSTITUTE OF TECH	105,457	90,445	88,507	82,924	58,432	50,349	51,241	49,533
28 UNIVERSITY OF COLORADO	104,576	93,416	85,433	75,798	74,887	69,359	59,080	55,028
29 UNIVERSITY OF FLORIDA	102,770	91,298	85,057	73,467	43,412	42,031	39,946	33,708
30 PURDUE UNIVERSITY	102,126	88,866	83,478	75,510	56,475	48,542	43,524	42,147
TOTAL, 1ST 30 INSTS.	4,874,194	4,337,751	3,893,442	3,532,703	3,220,638	2,917,266	2,623,655	2,392,553
31 MICHIGAN STATE UNIVERSITY	100,861	92,515	85,[illegible]26	79,043	47,725	46,605	44,133	43,067
32 UNIVERSITY OF ROCHESTER 2/	95,824	86,650	73,[illegible]70	65,305	75,939	64,064	55,015	48,744
33 NEW YORK UNIVERSITY	92,787	83,896	73,688	68,544	69,099	60,567	54,298	49,860
34 N C STATE UNIV AT RALEIGH	92,695	87,996	75,824	59,909	30,851	28,229	25,668	23,286
35 WASHINGTON UNIVERSITY	90,226	80,233	77,392	69,357	68,399	61,050	57,537	54,350
36 LOUISIANA STATE UNIV	89,933	88,953	72,870	68,383	26,699	25,492	19,981	18,044
37 UNIVERSITY OF CHICAGO 2/	88,026	79,929	77,022	75,314	73,304	66,950	64,010	61,985
38 UNIV OF NC AT CHAPEL HILL	85,454	75,958	53,960	50,892	64,625	55,746	44,430	43,384
39 NORTHWESTERN UNIVERSITY	80,178	72,337	68,246	51,075	46,755	42,317	40,709	36,519
40 RUTGERS THE ST UNIV OF NJ	79,894	59,392	51,568	49,729	24,059	23,947	19,984	18,894
TOTAL, 1ST 40 INSTS.	5,770,072	5,145,610	4,603,408	4,170,254	3,748,093	3,392,233	3,049,420	2,790,686
41 DUKE UNIVERSITY	78,831	68,899	61,025	55,040	62,879	56,437	50,793	46,808
42 CALIFORNIA INST OF TECH 2/	78,776	65,810	50,409	49,824	63,708	56,805	43,390	43,340
43 OREGON STATE UNIVERSITY	78,168	74,768	67,320	62,723	41,307	41,117	40,482	35,530
44 VA POLYTECH INST & ST U	75,450	61,966	53,113	47,802	30,259	25,650	23,090	20,406
45 UNIVERSITY OF PITTSBURGH	74,059	63,796	53,540	47,313	55,805	48,714	40,668	36,334
46 UNIVERSITY OF IOWA	73,596	64,923	56,770	54,771	52,497	48,059	41,468	40,460
47 IOWA ST U OF SCI & TECH 2/	72,642	67,276	62,472	64,861	17,376	16,030	20,755	21,050
48 UNIVERSITY OF CONNECTICUT	72,366	75,155	69,167	58,902	36,142	38,944	44,592	34,960
49 CARNEGIE-MELLON UNIV	71,920	60,292	53,787	43,174	41,706	37,666	33,419	30,546
50 YESHIVA UNIVERSITY	70,260	66,656	58,893	53,812	56,922	55,794	51,494	46,102
TOTAL, 1ST 50 INSTS.	6,516,140	5,815,151	5,189,904	4,708,476	4,206,694	3,817,449	3,439,571	3,146,222

SEE FOOTNOTES AT END OF TABLE.

TABLE 5. -- TOTAL AND FEDERALLY FINANCED R&D EXPENDITURES AT UNIVERSITIES AND COLLEGES: FISCAL YEARS 1983-86

- CONTINUED

(DOLLARS IN THOUSANDS)

INSTITUTIONAL RANKING	TOTAL				FEDERALLY FINANCED			
	1986	1985	1984	1983	1986	1985	1984	1983
51 BAYLOR COL OF MEDICINE	68,993	63,197	56,746	54,986	46,729	41,749	37,378	36,772
52 SUNY AT BUFFALO	64,404	57,045	52,711	50,129	47,308	42,860	39,417	38,415
53 UNIVERSITY OF MIAMI	64,154	58,035	51,057	48,283	36,531	32,817	30,644	32,236
54 U TEXAS SYSTEM CANCER CTR	63,318	56,137	49,317	44,509	21,304	19,408	16,379	15,112
55 ROCKEFELLER UNIVERSITY	63,216	59,159	55,353	52,000	35,738	30,047	26,713	23,625
56 UNIVERSITY OF UTAH	60,478	54,354	50,416	46,830	51,428	45,564	41,606	37,981
57 UNIV ALABAMA BIRMINGHAM	59,401	47,167	40,407	31,311	45,337	39,030	32,383	25,509
58 INDIANA UNIVERSITY	59,160	54,796	47,645	44,331	40,024	37,527	32,565	29,882
59 UNIV OF MISSOURI COLUMBIA	57,653	50,765	46,075	44,231	20,068	18,577	17,325	16,143
60 CASE WESTERN RESERVE UNIV	57,530E	51,598	47,217	42,691	47,032	42,182	39,337	34,963
TOTAL, 1ST 60 INSTS.	7,134,447	6,367,404	5,686,848	5,167,777	4,598,193	4,167,210	3,753,318	3,436,860
61 UNIVERSITY OF VIRGINIA	57,472	51,653	41,815	37,620	38,541	35,152	31,947	28,564
62 UNIV OF HAWAII-MANOA	57,383	54,025	51,051	45,401	35,322	34,886	32,701	27,633
63 OKLAHOMA STATE UNIVERSITY	56,006I	49,094	48,727	42,503I	13,123I	11,833	9,170	11,544I
64 UNIV OF NEBRASKA-LINCOLN	55,158	47,809	42,920	44,597	20,823	17,156	14,195	12,750
65 UNIV OF ILL CHICAGO	54,846	48,734	44,544	44,497	30,109	26,357	24,829	24,549
66 UNIVERSITY OF KENTUCKY	53,770	47,387	45,058	40,829	21,736	16,497	15,922	13,786
67 BOSTON UNIVERSITY	53,225	44,135	39,272	32,421	45,457	38,257	34,276	27,906
68 SUNY AT STONY BROOK	53,166	47,495	41,848	36,941	35,249	31,946	28,046	25,639
69 U TEX HLTH SCI CTR DALLAS	52,619	46,671	42,461	36,456	38,504	34,087	29,175	26,561
70 NEW MEXICO STATE UNIV	51,917	46,198	41,646	41,579	33,394	29,235	29,159	30,750
TOTAL, 1ST 70 INSTS.	7,680,009	6,850,605	6,126,190	5,570,621	4,910,451	4,442,616	4,002,738	3,666,542
71 PRINCETON UNIVERSITY	51,789	46,027	40,877	37,017	36,199	30,892	27,747	25,027
72 EMORY UNIVERSITY	51,115	30,706	27,522	24,284	32,819	26,136	22,896	20,163
73 UNIV OF CAL IRVINE	49,979	44,458	37,023	33,293	38,328	34,772	29,929	27,484
74 UNIVERSITY OF NEW MEXICO	49,795	45,581	33,161	33,356I	35,750	33,040	23,342	23,073I
75 COLORADO STATE UNIVERSITY	49,359	44,171	42,876	41,572	36,592	28,702	26,479	25,321
76 AUBURN UNIVERSITY	47,930	36,279	29,977	26,176	11,893	10,237	8,448	8,083
77 UNIV OF CAL RIVERSIDE	47,881	44,233	40,233	37,236	14,626	13,864	13,127	11,602
78 UNIV OF MASS AT AMHERST	46,434	37,719	33,199	29,696	25,127	21,338	18,773	17,072
79 UNIVERSITY OF CINCINNATI	44,368	42,709	39,747	35,195	27,758	24,924	22,350	20,074
80 FLORIDA STATE UNIVERSITY	44,179	34,969	29,840	22,767	21,850	16,910	12,054	10,810
TOTAL, 1ST 80 INSTS.	8,162,838	7,257,457	6,480,645	5,891,213	5,191,393	4,683,431	4,207,883	3,855,251
81 MISSISSIPPI STATE UNIV	43,813	41,376	38,410	35,714	12,781	11,151	10,310	7,775
82 WOODS HOLE OCNGRPHIC INST	43,675	43,132	43,454	42,070	38,666	38,560	37,765	35,997
83 WASHINGTON STATE UNIV	43,264	45,878	38,304	36,878	20,113	20,567	12,908	12,563
84 UTAH STATE UNIVERSITY	42,351	37,526	36,642	36,711	22,814	21,716	19,983	19,058
85 KANS ST U - AG & APP SCI	40,708	37,233	35,598	35,130	12,969	10,421	10,766	10,268
86 CUNY MT SINAI SCH OF MED	40,193	37,750	31,273	28,561	26,166	23,997	21,411	20,587
87 CLEMSON UNIVERSITY	38,963	32,326	29,900	27,643	7,550	9,965	6,668	7,822
88 VANDERBILT UNIVERSITY	37,715	34,180	29,760	26,322	27,269	24,709	21,649	19,889
89 UNIVERSITY OF OKLAHOMA	37,328	42,290	40,129	40,987	14,263	17,229	16,003	14,206
90 UNIV OF CAL SANTA BARBARA	36,516	30,055	27,404	22,884	27,320	23,131	21,552	17,863
TOTAL, 1ST 90 INSTS.	8,567,364	7,639,203	6,831,519	6,224,113	5,401,304	4,884,877	4,386,898	4,021,279
91 VIRGINIA COMMONWLTH UNIV	35,878	35,221	25,761	26,235	29,280	26,816	20,658	21,998E
92 TULANE UNIVERSITY	34,871	28,144	23,919	22,440	18,420	14,471	12,294	11,221
93 WAYNE STATE UNIVERSITY	33,589	27,941	26,386	23,990	15,789	15,682	14,965	12,713
94 ARIZONA STATE UNIVERSITY	33,580	28,953	22,048	22,294	13,541	12,556	9,031	10,288
95 U TEX HLTH SCI CTR S ANTO	33,165	29,845	25,911	24,743	22,779	19,697	16,550	16,005
96 U TEX HLTH SCI CTR HOUSTN	32,310	26,566	20,526	19,362	22,604	19,023	14,732	14,410
97 UNIV OF RHODE ISLAND	32,217I	28,241	23,481	24,766I	22,820I	20,577	21,081	19,326I
98 BROWN UNIVERSITY	31,906	28,344	25,771	22,805	25,333	22,645	21,294	19,728
99 UNIVERSITY OF KANSAS	30,497I	26,733I	24,010I	22,111I	18,802I	16,954I	15,277I	14,097I
100 UNIV OF MED & DENT OF N J	30,322	23,521	20,113	18,831	15,840	14,753	12,561	11,456
TOTAL, 1ST 100 INSTS.	8,895,699	7,922,712	7,069,445	6,451,690	5,606,512	5,068,051	4,545,341	4,172,521
TOTAL, ALL OTHER SAMPLED INSTS.	1,744,471	1,527,245	1,364,024	1,346,489	979,214	885,131	797,927	780,210
ESTIMATED TOTAL NON-SAMPLED INSTS.	78,232	74,336	74,911	0	47,621	44,591	42,410	0

1/ INCLUDES APPLIED PHYSICS LABORATORY WITH $295 MILLION IN TOTAL AND $290 MILLION IN FEDERALLY FINANCED R&D EXPENDITURES.

2/ DOES NOT INCLUDE R&D EXPENDITURES AT UNIVERSITY ASSOCIATED FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTERS (FFRDC'S).

NOTE: A NUMBER OF INSTITUTIONS HAVE DEVELOPED OR ARE IN THE PROCESS OF DEVELOPING NEW COMPUTER SYSTEMS AND METHODOLOGIES WHICH ENABLE THEM TO REPORT MORE ACCURATELY THE TOTAL COST OF SCIENCE AND ENGINEERING RESEARCH. FY 1986 COMPARISONS WITH DATA REPORTED IN EARLIER YEARS MAY BE INAPPROPRIATE IN SOME AREAS.

NUMBERS FOLLOWED BY THE LETTER "E" ARE ESTIMATED;
NUMBERS FOLLOWED BY "I" ARE IMPUTED.
DASHES INDICATE THAT DATA ARE NOT AVAILABLE;
DASHES FOLLOWED BY "C" INDICATE CONFIDENTIAL DATA.

SOURCE: NATIONAL SCIENCE FOUNDATION, SRS

TABLE 6. -- INDUSTRY-SPONSORED R&D EXPENDITURES AT UNIVERSITIES AND COLLEGES: FISCAL YEARS 1979-86

(DOLLARS IN THOUSANDS)

INSTITUTIONAL RANKING	1986	1985	1984	1983	1982	1981	1980	1979
TOTAL, ALL INSTITUTIONS	667,362	542,849	460,641	377,930	333,455	290,741	236,967	194,186
1 MASS INST OF TECHNOLOGY	34,764	32,007	26,458	17,944	17,195	14,964	11,402	6,550
2 GEORGIA INSTITUTE OF TECH	21,944	18,730	18,131	13,255	11,359	8,581	6,243	4,892
3 CARNEGIE-MELLON UNIV	17,591	11,780	12,603	7,922	4,844	5,258	5,010	5,429
4 PENNSYLVANIA STATE UNIV	16,905	15,715	12,995	12,445	10,581	10,056	7,842	5,420
5 UNIVERSITY OF WASHINGTON	16,493	8,887	6,801	6,176	5,140	4,943	3,830	3,157
6 CORNELL UNIVERSITY	14,256	12,526	13,229	9,206	7,495	5,879	5,153	4,462
7 UNIV OF CAL LOS ANGELES 1/	12,659	0	0	0	0	0	0	0
8 UNIVERSITY OF MICHIGAN	12,481	11,677	7,559	5,984	7,408	6,712	6,145	6,155
9 WASHINGTON UNIVERSITY	11,352	9,617	8,339	5,601	2,388	1,060	1,029	820
10 UNIVERSITY OF ARIZONA	11,158	9,402	7,837	7,956	8,554	7,567	5,923	4,894
TOTAL, 1ST 10 INSTS.	169,603	130,341	113,952	86,489	74,964	65,020	52,577	41,779
11 UNIVERSITY OF MINNESOTA	11,157	8,135	8,053	5,962	4,720	4,559	4,352	3,629
12 N C STATE UNIV AT RALEIGH	10,452	8,249	3,026	3,246	2,712I	2,500	1,800	3,000
13 UNIVERSITY OF FLORIDA	10,038	8,254	5,000	4,345	3,650	2,388	3,045E	2,083
14 UNIV OF MD COLLEGE PARK	9,384E	8,532E	7,691E	7,539E	4,964E	2,817	2,263	1,173
15 UNIVERSITY OF MIAMI	8,897	7,892	5,600	4,384	4,605	1,690	1,895	1,732
16 STANFORD UNIVERSITY	8,833	8,044	9,043	6,430	8,969	5,713	3,215	3,222
17 PURDUE UNIVERSITY	8,776	9,583	9,232	9,269	7,405	6,849	4,756	3,822
18 UNIV OF ILL URBANA	8,571	7,506	4,922	3,448	1,598	4,103	3,404	2,463
19 UNIVERSITY OF KENTUCKY	8,173	4,768	4,378	3,007	3,337	2,763	312	922
20 UNIV OF WIS-MADISON	8,007	7,217	5,451	4,502	3,446	2,880	2,615	2,243
TOTAL, 1ST 20 INSTS.	261,891	208,521	176,348	138,621	120,370	101,282	80,234	66,068
21 TEXAS A & M UNIVERSITY	7,944	11,731	5,601	6,483	4,933	6,219	4,281	0
22 OHIO STATE UNIVERSITY	7,826	7,140	6,559	6,431	4,260	3,752	3,699	3,080
23 SYRACUSE UNIVERSITY	7,397	2,298	1,120	943	1,481	942	213	366
24 DUKE UNIVERSITY	7,300	5,193	4,622	3,166	510I	1,053	779	1,479
25 NEW MEXICO STATE UNIV	6,985	6,237E	5,121E	0	0	0	0	0
26 HARVARD UNIVERSITY	6,723I	5,410E	4,883E	4,695E	4,550E	4,422E	3,995E	3,524E
27 UNIVERSITY OF ROCHESTER	6,714	6,896	7,134	6,481	4,561	7,336	7,869	7,950
28 VA POLYTECH INST & ST U	6,463	5,924	5,818	5,988	6,515	5,658	3,692	3,319
29 UNIV OF CAL BERKELEY 1/	6,143	0	0	0	0	0	0	0
30 UNIV OF CAL SAN DIEGO 1/	5,995	0	0	0	0	0	0	0
TOTAL, 1ST 30 INSTS.	331,381	259,350	217,206	172,808	147,180	130,664	104,762	85,786
31 RENSSELAER POLYTECH INST	5,813I	5,262	4,785	3,589	2,848	2,103	1,394	1,236
32 UNIVERSITY OF PITTSBURGH	5,428	4,069	2,813	2,919	1,445	799	774	930
33 THOMAS JEFFERSON UNIV	5,095	4,740	3,681	4,290	2,363	2,149	355E	345
34 TULANE UNIVERSITY	4,689	4,072	3,372	2,410	2,516	1,439	781	739
35 OREGON STATE UNIVERSITY	4,650I	4,245	3,519	3,424	2,782	2,564	1,572	1,448
36 UNIV OF MISSOURI COLUMBIA	4,562	3,402	2,128	1,492	983	1,224	509	618
37 UNIV OF CAL DAVIS 1/	4,510	0	0	0	0	0	0	0
38 UNIV ALABAMA BIRMINGHAM	4,508	3,705	3,117	2,265	1,509	1,189	1,585	947
39 UNIVERSITY OF NEW MEXICO	4,450	3,875	3,523	3,019I	2,645	2,381	2,822	2,909
40 UNIVERSITY OF GEORGIA	4,360	3,729	4,356	4,486	3,059	2,630	2,076	1,924
TOTAL, 1ST 40 INSTS.	379,446	296,449	248,500	200,702	167,330	147,142	116,630	96,882
41 VANDERBILT UNIVERSITY	4,356	3,376	3,040	2,403	2,146	2,013	1,890	1,442
42 U TEX HLTH SCI CTR S ANTO	4,302	3,458	2,497	2,237	1,495	1,077	722	485
43 UNIV OF CAL IRVINE 1/	4,295	0	0	0	0	0	0	0
44 U TEX HLTH SCI CTR DALLAS	4,295	3,967	3,620	2,792	1,915	1,654	1,319	1,164
45 NEW YORK UNIVERSITY	4,292	3,742	3,240	2,649	2,952	1,877	2,080	2,269
46 TEXAS TECH UNIVERSITY	4,213	3,650	2,077I	1,910	1,953	1,961	1,969	1,616
47 UNIV OF CAL SAN FRAN 1/	4,119	0	0	0	0	0	0	0
48 UNIVERSITY OF CONNECTICUT	4,090	4,572	3,537	1,743	1,570	1,104	959	898
49 COLUMBIA UNIV MAIN DIV	4,086	4,027	349	336	459	429	364	603
50 UNIV OF MASS AT AMHERST	4,071	3,096	2,627	2,018	1,601	964	413	606
TOTAL, 1ST 50 INSTS.	421,565	326,337	269,487	216,790	181,421	158,221	126,346	105,965

SEE FOOTNOTES AT END OF TABLE.

TABLE 6. -- INDUSTRY-SPONSORED R&D EXPENDITURES AT UNIVERSITIES AND COLLEGES: FISCAL YEARS 1979-86

- CONTINUED

(DOLLARS IN THOUSANDS)

INSTITUTIONAL RANKING	1986	1985	1984	1983	1982	1981	1980	1979
51 BROWN UNIVERSITY	3,848	3,000	2,227	1,527	2,236	1,700	650	94
52 CALIFORNIA INST OF TECH	3,806	2,678	3,798	2,445	2,025	2,174	1,993	1,266
53 U TEX HLTH SCI CTR HOUSTN	3,661	1,217	883	707	848	613	421	255
54 UNIVERSITY OF COLORADO	3,567	2,234	1,809	1,542	2,860E	2,794E	2,674	1,052
55 LEHIGH UNIVERSITY	3,562	2,508	1,865	1,488	1,294	1,167	1,076	708
56 UNIVERSITY OF DELAWARE	3,551	2,809	2,752	3,075	2,445	2,246	2,138E	2,205
57 JOHNS HOPKINS UNIVERSITY	3,538	3,076	0	207E	192	38	0	0
58 UNIV TENN CTR HEALTH SCI	3,488	2,379	2,206	1,581	584	514	400	398E
59 BAYLOR COL OF MEDICINE	3,430	4,241	3,932	4,726	3,054	2,927	2,801	1,127
60 OKLAHOMA STATE UNIVERSITY	3,421I	2,972	2,631	2,283I	2,100	2,446	2,224	1,154
TOTAL, 1ST 60 INSTS.	457,437	353,451	291,590	236,371	199,059	174,840	140,723	114,224
61 N MEX INST MINING & TECH	3,335	1,942I	1,739	879I	784	1,034	786	395
62 UNIV OF VT & ST AGRIC COL	3,331	2,613	2,130	1,665	1,369	1,013	801	945
63 INDIANA UNIVERSITY	3,325	2,718	2,361	2,402	1,463	1,258	831	672
64 ROCKEFELLER UNIVERSITY	3,321	2,861	2,817	2,661	1,740	1,122	678	669
65 WORCESTER POLY INSTITUTE	3,289I	2,966I	2,664I	2,437	2,234	1,449	1,630	2,140
66 DESERT RESEARCH INSTITUTE	3,209	2,755	2,585	2,375	2,196	2,726	1,814	1,358
67 UNIV OF PENNSYLVANIA	3,073	3,685	3,013	1,821	2,592	3,580	2,010	2,011
68 ARIZONA STATE UNIVERSITY	3,061	2,441	1,588	1,373	750	285	124	173
69 IOWA ST U OF SCI & TECH	3,043	3,131	2,925	2,957	2,106	2,396	1,854	1,916
70 CASE WESTERN RESERVE UNIV	2,992	2,408	1,802	1,720	1,896	1,729	1,790	1,419
TOTAL, 1ST 70 INSTS.	489,416	380,971	315,214	256,661	216,189	191,432	153,041	125,922
71 PRINCETON UNIVERSITY	2,989	1,184	958	805	693	557	423	321
72 MICHIGAN STATE UNIVERSITY	2,96[illegible]	2,686	2,446	619	2,200	2,411	2,543	2,368
73 CLEMSON UNIVERSITY	2,963	1,800	2,009	2,223	2,319	2,098	1,126	790
74 DREXEL UNIVERSITY	2,940	2,237	1,562	611	542	487	348	592
75 UNIV OF MAINE ORONO	2,856	1,559	2,320	1,404	1,088	1,087	392	696
76 U OF HOUSTON UNIV PARK	2,851	1,925	1,500	1,239	1,472	2,286	602	1,236
77 AUBURN UNIVERSITY	2,805	2,699	2,604	1,904	1,560	1,266	530	0
78 UNIVERSITY OF DAYTON	2,786	2,556	2,226	2,108	1,793	990I	1,257	1,684
79 UNIVERSITY OF NOTRE DAME	2,743	2,502	1,874	1,237	1,076	805	683	684
80 UNIV OF TEXAS AT AUSTIN	2,677	2,136	1,932	1,750	1,624	1,340	1,237	1,122
TOTAL, 1ST 80 INSTS.	517,995	402,255	334,645	270,561	230,556	204,759	162,182	135,415
81 UNIVERSITY OF IDAHO	2,670	2,793	2,567	2,260	1,622	1,001	301	246
82 RUTGERS THE ST UNIV OF NJ	2,594	2,108	1,817	1,694	1,264	979	1,008	807
83 UNIV OF ARK FAYETTEVILLE	2,585	2,093	1,391	1,514	1,402	1,048	1,186	807
84 COLORADO SCHOOL OF MINES	2,516	2,201	2,356	1,609	900	1,175	497	494I
85 UNIVERSITY OF OKLAHOMA	2,513	2,328	2,075	2,260	1,642	1,470	647	261
86 MICHIGAN TECH UNIVERSITY	2,490	2,511	1,901	1,453	1,673	1,642	2,064	1,394
87 EMORY UNIVERSITY	2,427	2,395	2,395	1,957	1,271	1,042	867	746
88 WASHINGTON STATE UNIV	2,261	1,465	1,581	1,517	2,865	1,320	795	1,031
89 NORTHWESTERN UNIVERSITY	2,256	1,690	1,088	1,365	895	601	290	486
90 UNIVERSITY OF AKRON	2,256	1,056	846	322	411	282	186	138
TOTAL, 1ST 90 INSTS.	542,563	422,895	352,662	286,512	244,501	215,319	170,023	141,825
91 BRIGHAM YOUNG UNIVERSITY	2,218I	2,001	1,787	1,207	1,328	2,446I	2,198E	2,035
92 VIRGINIA COMMONWLTH UNIV	2,195	2,019	1,412	350E	299	49	143	300
93 UNIV OF SOUTHERN CAL	2,175	5,361	4,800	2,012	5,223	5,853	7,462	2,919
94 OREGON GRADUATE CENTER	2,147I	1,937I	1,732	1,108I	1,042I	922	878	972
95 MONTANA STATE UNIVERSITY	2,138	1,628	1,818	1,054	860	1,097	1,070	617
96 UNIV OF CAL SANTA BARB 1/	2,097	0	0	0	0	0	0	0
97 MISSISSIPPI STATE UNIV	2,081	1,606	1,250	1,229	1,536	628	458	372
98 BOSTON UNIVERSITY	2,076	1,994	906	812	965	39	241	165
99 UNIV OF CAL RIVERSIDE 1/	2,041	0	0	0	0	0	0	0
100 UNIV OF NEBRASKA-LINCOLN	1,985	1,721	1,545	1,203	1,037	762	996	638
TOTAL, 1ST 100 INSTS.	563,716	441,162	367,912	295,487	256,791	227,115	183,469	149,843
TOTAL, ALL OTHER SAMPLED INSTS.	96,302	95,301	85,865	82,443	76,664	63,626	53,498	44,343
ESTIMATED TOTAL NON-SAMPLED INSTS.	7,344	6,386	6,864	0	0	0	0	0

1/ DATA FOR THE UNIV OF CALIFORNIA (UC) INCLUDE INDUSTRY SUPPORTED EXPENDITURES FOR THE FIRST TIME IN FY 1986. PRIOR YEARS' INDUSTRY DATA FOR UC ARE NOT AVAILABLE.

NOTE: A NUMBER OF INSTITUTIONS HAVE DEVELOPED OR ARE IN THE PROCESS OF DEVELOPING NEW COMPUTER SYSTEMS AND METHODOLOGIES WHICH ENABLE THEM TO REPORT MORE ACCURATELY THE TOTAL COST OF SCIENCE AND ENGINEERING RESEARCH. FY 1986 COMPARISONS WITH DATA REPORTED IN EARLIER YEARS MAY BE INAPPROPRIATE IN SOME AREAS.

NUMBERS FOLLOWED BY THE LETTER "E" ARE ESTIMATED;
NUMBERS FOLLOWED BY "I" ARE IMPUTED.
DASHES INDICATE THAT DATA ARE NOT AVAILABLE;
DASHES FOLLOWED BY "C" INDICATE CONFIDENTIAL DATA.

SOURCE: NATIONAL SCIENCE FOUNDATION, SRS

TABLE 7. — CURRENT FUND EXPENDITURES FOR RESEARCH EQUIPMENT AT UNIVERSITIES AND COLLEGES BY SCIENCE/ENGINEERING FIELD AND SOURCE OF FUNDS: FISCAL YEARS 1981 AND 1985-86

(DOLLARS IN THOUSANDS)

FIELD	TOTAL			FEDERAL			NON-FEDERAL		
	1981	1985	1986	1981	1985	1986	1981	1985	1986
TOTAL	413,972	654,652	764,848	265,048	426,874	496,664	148,924	227,778	268,184
ENGINEERING, TOTAL	69,017	119,246	138,894	42,396	75,633	80,992	26,621	43,613	57,902
AERONAUTICAL AND ASTRONAUTICAL	2,870	6,516	7,336	2,097	5,460	5,813	773	1,057	1,523
CHEMICAL	7,019	10,850	13,226	4,436	6,339	7,655	2,583	4,511	5,571
CIVIL	5,036	10,444	11,935	2,772	6,505	6,472	2,264	3,939	5,463
ELECTRICAL	18,377	31,179	34,221	13,262	21,242	22,393	5,115	9,938	11,829
MECHANICAL	9,694	16,259	16,913	5,695	10,359	9,940	3,999	5,900	6,973
OTHER, N.E.C.	26,021	43,998	55,262	14,134	25,728	28,720	11,887	18,269	26,542
ALL SCIENCES, TOTAL	344,955	535,406	625,954	222,652	351,241	415,672	122,303	184,165	210,282
PHYSICAL SCIENCES	76,131	141,884	164,084	58,475	113,387	133,410	17,656	28,496	30,674
ASTRONOMY	4,582	7,002	5,929	3,232	4,858	4,226	1,350	2,143	1,703
CHEMISTRY	35,376	53,952	61,062	25,918	41,689	45,847	9,458	12,263	15,215
PHYSICS	32,474	71,272	88,817	26,320	60,431	77,123	6,154	10,841	11,695
OTHER, N.E.C.	3,699	9,658	8,275	3,005	6,409	6,215	694	3,249	2,060
ENVIRONMENTAL SCIENCES	31,472	46,990	50,714	19,165	32,106	35,431	12,307	14,884	15,283
ATMOSPHERIC	5,717	8,466	10,177	3,499	7,097	7,973	2,218	1,369	2,204
EARTH SCIENCES	11,723	18,604	16,077	6,924	10,605	9,156	4,799	7,999	6,921
OCEANOGRAPHY	8,858	14,907	17,441	6,023	11,019	13,608	2,835	3,888	3,833
OTHER, N.E.C.	5,174	5,012	7,019	2,719	3,385	4,694	2,455	1,627	2,326
MATHEMATICAL SCIENCES	1,907	5,755	4,961	1,127	4,694	3,405	780	1,061	1,557
COMPUTER SCIENCES	10,896	38,667	46,549	5,436	32,709	39,226	5,460	5,958	7,323
LIFE SCIENCES	202,220	269,862	318,062	126,175	151,349	182,722	76,045	118,513	135,340
AGRICULTURAL SCIENCES	36,887	48,731	57,484	12,316	13,837	18,487	24,571	34,894	38,996
BIOLOGICAL SCIENCES	76,903	101,474	116,173	54,481	68,454	79,291	22,422	33,020	36,882
MEDICAL SCIENCES	81,501	109,213	132,922	54,929	63,937	78,831	26,572	45,276	54,091
OTHER, N.E.C.	6,929	10,445	11,482	4,449	5,121	6,112	2,480	5,323	5,370
PSYCHOLOGY	6,019	8,465	9,018	4,466	6,160	6,055	1,553	2,305	2,963
SOCIAL SCIENCES	9,155	8,929	12,152	3,999	3,903	3,779	5,156	5,026	8,373
ECONOMICS	1,858	2,591	3,233	525	932	1,056	1,333	1,659	2,177
POLITICAL SCIENCE	1,516	1,067	1,071	756	357	294	760	710	778
SOCIOLOGY	2,554	1,846	1,832	1,478	1,136	847	1,076	710	985
OTHER, N.E.C.	3,227	3,426	6,015	1,240	1,479	1,583	1,987	1,947	4,433
OTHER SCIENCES, N.E.C.	7,155	14,853	20,414	3,809	6,932	11,644	3,346	7,921	8,771

SOURCE: NATIONAL SCIENCE FOUNDATION, SRS

TABLE 8. -- CAPITAL EXPENDITURES AT UNIVERSITIES AND COLLEGES BY SCIENCE/ENGINEERING FIELD AND SOURCE OF FUNDS: FISCAL YEARS 1979-86 1/

(DOLLARS IN THOUSANDS)

FIELD	1979	1980	1981	1982	1983	1984	1985	1986
TOTAL	696,218	794,512	952,672	969,147	1,098,941	1,215,249	1,312,657	1,578,818
ENGINEERING	87,128	89,297	103,329	144,457	134,980	142,894	187,320	316,440
ALL SCIENCES, TOTAL	609,090	705,215	849,343	824,690	963,961	1,072,355	1,125,337	1,262,378
PHYSICAL SCIENCES	64,685	77,154	87,813	82,100	97,447	116,071	131,108	152,808
ENVIRONMENTAL SCIENCES	25,153	36,208	35,025	42,365	41,112	36,814	54,053	47,111
MATHEMATICAL/COMPUTER SCIENCES	27,282	32,318	30,517	34,328	53,098	49,971	75,657	91,088
LIFE SCIENCES	428,293	459,057	597,635	590,353	678,778	741,416	751,648	839,906
PSYCHOLOGY	7,060	17,982	10,991	12,798	17,012	35,205	20,900	25,472
SOCIAL SCIENCES	21,358	35,073	45,138	30,797	40,870	51,933	61,849	50,711
OTHER SCIENCES, N.E.C.	35,259	47,423	42,224	31,949	35,624	40,946	30,125	55,282
FEDERAL SOURCES, TOTAL	164,460	149,563	153,800	116,651	131,517	141,728	144,296	193,120
ENGINEERING	20,927	20,438	17,601	18,136	16,163	24,013	16,778	33,635
ALL SCIENCES, TOTAL	143,533	129,125	136,199	98,515	115,354	117,715	127,519	159,485
PHYSICAL SCIENCES	32,186	22,463	25,529	20,154	18,579	18,916	31,300	35,089
ENVIRONMENTAL SCIENCES	8,220	8,033	6,866	4,404	3,644	3,490	3,547	6,184
MATHEMATICAL/COMPUTER SCIENCES	2,983	5,653	4,944	3,798	4,458	5,296	6,718	14,048
LIFE SCIENCES	90,796	86,105	89,410	66,004	81,016	85,412	80,829	94,310
PSYCHOLOGY	1,740	2,002	1,580	1,023	1,365	1,008	820	1,266
SOCIAL SCIENCES	2,076	1,528	6,376	1,374	4,959	2,932	2,096	2,505
OTHER SCIENCES, N.E.C.	5,532	3,341	1,494	1,758	1,333	660	2,209	6,082
OTHER SOURCES, TOTAL	531,758	644,949	798,872	852,496	967,424	1,073,521	1,168,361	1,385,698
ENGINEERING	66,201	68,859	85,728	126,321	118,817	118,881	170,542	282,805
ALL SCIENCES, TOTAL	465,557	576,090	713,144	726,175	848,607	954,640	997,818	1,102,893
PHYSICAL SCIENCES	32,499	54,691	62,284	61,946	78,883	97,154	99,808	117,719
ENVIRONMENTAL SCIENCES	16,933	28,175	28,159	37,961	37,468	33,324	50,506	40,927
MATHEMATICAL/COMPUTER SCIENCES	24,299	26,665	25,573	30,530	48,640	44,675	68,939	77,040
LIFE SCIENCES	337,497	372,952	508,225	524,349	597,762	656,004	670,817	745,596
PSYCHOLOGY	5,320	15,980	9,411	11,775	15,647	34,197	20,080	24,206
SOCIAL SCIENCES	19,282	33,545	38,762	29,423	35,911	49,001	59,753	48,206
OTHER SCIENCES, N.E.C.	29,727	44,082	40,730	30,191	34,291	40,286	27,916	49,200

1/ INCLUDES EXPENDITURES FOR FACILITIES AND EQUIPMENT FOR RESEARCH, DEVELOPMENT, AND INSTRUCTION.

SOURCE: NATIONAL SCIENCE FOUNDATION, SRS

TABLE 9. -- FEDERAL OBLIGATIONS TO UNIVERSITIES AND COLLEGES
BY TYPE OF ACTIVITY: FISCAL YEARS 1963-86 1/

(DOLLARS IN THOUSANDS)

FISCAL YEAR	TOTAL OBLIGATIONS	ACADEMIC SCIENCE/ENGINEERING							NON-SCIENCE/ ENGINEERING ACTIVITIES
		TOTAL ACADEMIC SCIENCE/ ENGINEERING	RESEARCH AND DEVELOPMENT	R&D PLANT 2/	FACILITIES FOR INSTRUCTION IN SCIENCE & ENGINEERING	FELLOW-SHIPS, TRAINEE-SHIPS, & TRAINING GRANTS	GENERAL SUPPORT FOR SCIENCE/ ENGINEERING	OTHER SCIENCE/ ENGINEERING ACTIVITIES	
1963	1,413,015	1,328,511	829,524	105,896	(2)	(2)	(2)	393,091	84,504
1964	1,624,963	1,528,604	975,597	100,837	(2)	(2)	(2)	452,170	96,359
1965	2,305,455	1,816,171	1,094,963	126,196	(2)	(2)	(2)	595,012	489,284
1966	3,009,950	2,163,504	1,252,146	114,767	(2)	365,560	(2)	431,031	846,446
1967	3,317,709	2,323,795	1,301,242	111,309	(2)	447,236	(2)	464,008	993,914
1968	3,386,637	2,349,817	1,398,305	96,148	(2)	440,895	(2)	414,469	1,036,820
1969	3,462,370	2,361,399	1,474,681	54,516	(2)	436,270	(2)	395,932	1,100,971
1970	3,236,612	2,187,579	1,446,618	44,778	(2)	429,408	(2)	266,775	1,049,033
1971	3,498,596	2,343,129	1,551,391	29,942	28,729	421,029	99,669	212,369	1,155,467
1972	4,144,570	2,598,989	1,852,963	36,917	26,341	387,888	83,288	211,592	1,545,581
1973	3,839,102	2,464,362	1,870,690	43,338	13,372	287,210	38,964	210,788	1,374,740
1974	4,480,372	2,736,984	2,085,204	29,009	3,506	326,600	86,974	205,691	1,743,388
1975	4,547,191	2,805,783	2,246,088	44,787	5,026	201,273	46,353	262,256	1,741,408
1976	5,402,764	2,959,656	2,430,970	23,899	3,210	174,871	74,483	252,223	2,443,108
1977	6,489,735	3,351,337	2,803,017	36,471	3,282	184,671	75,928	247,968	3,138,398
1978	7,471,843	3,959,832	3,385,770	34,328	4,906	205,925	74,398	254,505	3,512,011
1979 3/.....	7,603,908	4,472,659	3,873,514	32,068	6,743	204,866	92,483	262,985	3,131,249
1980	8,298,118	4,790,286	4,159,867	37,780	3,776	210,121	91,541	287,211	3,507,832
1981 3/.....	8,640,193	5,062,124	4,410,199	27,694	4,563	205,448	92,721	321,499	3,578,069
1982 3/.....	8,776,258	5,178,890	4,553,755	31,200	829	176,582	80,137	336,387	3,597,368
1983 3/.....	9,340,970	5,679,978	5,023,677	37,547	2,522	189,616	94,847	331,769	3,660,992
1984	10,118,460	6,389,968	5,634,400	49,764	1,889	194,895	112,588	396,432	3,728,492
1985	10,959,609	7,249,486	6,368,608	113,932	4,947	253,082	119,171	389,746	3,710,123
1986	11,584,087	7,399,121	6,538,280	105,827	4,990	246,196	111,130	392,698	4,184,966

1/ NOTE THAT SOME TREND SHIFTS ARE RELATED TO INSTITUTIONAL RECLASSIFICATION. AS OF 1978, TWO LABORATORIES WHICH WERE FORMERLY CONSIDERED ACADEMICALLY ADMINISTERED FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTERS (FFRDC'S) BECAME PART OF THEIR RESPECTIVE INSTITUTIONS: APPLIED PHYSICS LABORATORY (JOHNS HOPKINS UNIVERSITY) AND APPLIED RESEARCH LABORATORY (PENNSYLVANIA STATE UNIVERSITY). DATA FOR THESE LABORATORIES ARE THUS INCLUDED IN THE ACADEMIC FIGURES FOR 1978-86, BUT EXCLUDED FOR PRIOR YEARS. SIMILARLY, DRAPER LABORATORIES SEPARATED FROM THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY AS OF FISCAL YEAR 1974 TO BECOME AN INDEPENDENT NONPROFIT INSTITUTION; ACADEMIC DATA SHOWN FOR 1963-73 INCLUDE DRAPER LABORATORIES, WHILE THOSE FOR 1974-86 DO NOT.

2/ NOT SEPARATELY IDENTIFIED BUT INCLUDED UNDER "OTHER SCIENCE/ ENGINEERING ACTIVITIES".

3/ TOTAL AND NON-SCIENCE/ENGINEERING OBLIGATIONS WERE ESTIMATED BASED ON REVISED DATA FROM THE DEPARTMENT OF EDUCATION.

SOURCE: NATIONAL SCIENCE FOUNDATION, SRS

TABLE 10. -- FEDERAL OBLIGATIONS TO THE 100 UNIVERSITIES AND COLLEGES RECEIVING THE LARGEST AMOUNTS BY TYPE OF ACTIVITY: FISCAL YEAR 1986

(DOLLARS IN THOUSANDS)

RANK	INSTITUTION (RANKED BY TOTAL FEDERAL OBLIGATIONS)	TOTAL, ALL ACTIVITIES	ACADEMIC SCIENCE/ENGINEERING							NON-SCIENCE/ENGINEERING
			TOTAL ACADEMIC SCIENCE/ENGINEERING	RESEARCH AND DEVELOPMENT	R&D PLANT	FACILITIES FOR INSTRUCTION IN SCIENCE/ENG.	FELLOWSHIPS, TRAINEESHIPS, AND TRAINING GRANTS	GENERAL SUPPORT SCIENCE/ENGINEERING	OTHER SCIENCE/ENGINEERING	
	TOTAL, ALL INSTITUTIONS	11,584,087	7,399,121	6,538,280	105,827	4,990	246,196	111,130	392,698	4,184,966
1	JOHNS HOPKINS UNIVERSITY	465,453	457,525	445,718	45	0	10,075	1,609	78	7,928
2	MASS INST OF TECHNOLOGY	212,360	207,867	188,120	10,499	0	7,260	859	1,129	4,493
3	STANFORD UNIVERSITY	201,452	195,454	180,186	3,743	10	9,866	900	749	5,998
4	UNIVERSITY OF WASHINGTON	178,210	157,154	146,718	443	0	7,745	1,744	504	21,056
5	HOWARD UNIVERSITY	169,084	14,200	9,497	1,799	0	849	1,957	98	154,884
6	CORNELL UNIVERSITY	160,138	149,599	112,707	8,879	0	4,425	1,220	22,368	10,539
7	COLUMBIA UNIV MAIN DIV	157,769	142,430	127,131	8,232	0	5,575	1,125	367	15,339
8	UNIV OF CAL LOS ANGELES	149,345	133,150	125,483	193	0	5,255	1,810	409	16,195
9	UNIV OF CAL SAN DIEGO	147,381	140,878	133,243	1,526	0	5,147	887	75	6,503
10	UNIV OF WIS-MADISON	143,693	138,827	120,626	1,657	0	4,793	1,361	10,390	4,866
	TOTAL 1ST 10 INSTITUTIONS	1,984,885	1,737,084	1,589,429	37,016	10	60,990	13,472	36,167	247,801
11	UNIVERSITY OF MINNESOTA	138,970	114,473	100,898	30	77	3,746	1,448	8,274	24,497
12	UNIVERSITY OF MICHIGAN	135,186	120,168	111,232	576	16	5,950	1,509	885	15,018
13	HARVARD UNIVERSITY	133,226	125,127	110,356	965	0	11,919	1,036	851	8,099
14	YALE UNIVERSITY	129,700	123,849	111,687	706	0	9,143	1,617	696	5,851
15	UNIV OF CAL BERKELEY	126,380	104,958	96,834	0	0	6,996	546	582	21,422
16	UNIV OF PENNSYLVANIA	124,219	112,305	103,487	269	0	6,926	1,421	202	11,914
17	PENNSYLVANIA STATE UNIV	123,708	99,665	87,041	0	0	1,009	703	10,912	24,043
18	UNIV OF CAL SAN FRANCISCO	119,318	113,828	104,453	214	0	7,525	1,036	600	5,490
19	UNIV OF ILL URBANA	104,040	103,091	88,986	100	0	1,509	440	12,056	949
20	OHIO STATE UNIVERSITY	96,119	78,746	58,078	0	0	715	811	19,142	17,373
	TOTAL 1ST 20 INSTITUTIONS	3,215,751	2,833,294	2,562,481	39,876	103	116,428	24,039	90,367	382,457
21	UNIVERSITY OF COLORADO	92,702	78,496	73,630	255	41	3,386	882	302	14,206
22	UNIV OF SOUTHERN CAL	92,411	80,145	77,533	66	0	1,518	694	334	12,266
23	WASHINGTON UNIVERSITY	83,777	80,206	72,750	0	0	6,659	797	0	3,571
24	UNIVERSITY OF CHICAGO	83,262	78,988	71,535	0	0	7,036	417	0	4,274
25	NEW YORK UNIVERSITY	82,870	71,596	68,372	96	0	2,699	429	0	11,274
26	DUKE UNIVERSITY	81,777	77,301	70,034	620	0	5,000	1,057	590	4,476
27	UNIVERSITY OF ROCHESTER	80,507	76,589	71,521	1,537	0	2,667	864	0	3,918
28	UNIV OF NC AT CHAPEL HILL	80,459	75,475	70,526	0	0	4,057	862	30	4,984
29	UNIVERSITY OF PITTSBURGH	79,116	63,125	59,373	183	0	1,729	1,442	398	15,991
30	UNIV OF TEXAS AT AUSTIN	77,483	76,288	74,028	200	0	935	528	597	1,195
	TOTAL 1ST 30 INSTITUTIONS	4,050,115	3,591,503	3,271,783	42,833	144	152,114	32,011	92,618	458,612
31	MICHIGAN STATE UNIVERSITY	74,979	59,788	48,740	274	0	653	801	9,320	15,191
32	UNIVERSITY OF FLORIDA	74,267	58,358	48,911	523	0	1,361	811	6,752	15,909
33	INDIANA UNIVERSITY	70,589	44,819	41,879	0	19	1,374	750	797	25,770
34	UNIVERSITY OF UTAH	69,102	57,470	55,290	45	0	1,108	677	350	11,632
35	UNIVERSITY OF IOWA	68,092	56,724	52,226	441	0	3,157	749	151	11,368
36	UNIV OF MD COLLEGE PARK	67,516	59,098	53,906	270	0	523	137	4,262	8,416
37	PURDUE UNIVERSITY	67,088	57,424	46,827	425	0	871	451	8,850	9,664
38	UNIVERSITY OF ARIZONA	67,009	56,212	51,123	0	0	1,374	1,065	2,650	10,797
39	BOSTON UNIVERSITY	66,327	51,414	48,518	0	0	2,076	775	45	14,913
40	NORTHWESTERN UNIVERSITY	65,264	56,780	43,609	10,132	0	1,950	1,089	0	8,484
	TOTAL 1ST 40 INSTITUTIONS	4,740,346	4,149,590	3,762,812	54,943	163	166,561	39,316	125,795	590,756
41	CARNEGIE-MELLON UNIV	65,186	61,083	59,854	100	0	724	148	257	4,103
42	YESHIVA UNIVERSITY	64,261	62,867	58,518	0	0	3,806	543	0	1,394
43	CALIFORNIA INST OF TECH	63,519	63,519	59,707	459	0	2,902	236	215	0
44	GEORGIA INSTITUTE OF TECH	62,961	56,323	46,557	0	50	135	369	9,212	6,638
45	TEXAS A & M UNIVERSITY	61,857	53,341	35,891	389	0	394	588	16,079	8,516
46	GALLAUDET COLLEGE	60,378	2,800	2,762	0	0	38	0	0	57,578
47	UNIV ALABAMA BIRMINGHAM	60,210	49,732	45,856	203	0	2,420	1,253	0	10,478
48	CASE WESTERN RESERVE UNIV	57,817	53,392	49,331	0	0	3,262	781	18	4,425
49	INTER AM U PR-SAN GERMAN	57,145	0	0	0	0	0	0	0	57,145
50	U P R - REGIONAL COL ADMN	56,446	0	0	0	0	0	0	0	56,446
	TOTAL 1ST 50 INSTITUTIONS	5,350,126	4,552,647	4,121,288	56,094	213	180,242	43,234	151,576	797,479

SEE FOOTNOTES AT END OF TABLE.

TABLE 10. -- FEDERAL OBLIGATIONS TO THE 100 UNIVERSITIES AND COLLEGES RECEIVING THE LARGEST AMOUNTS BY TYPE OF ACTIVITY: FISCAL YEAR 1986

CONTINUED

(DOLLARS IN THOUSANDS)

RANK	INSTITUTION (RANKED BY TOTAL FEDERAL OBLIGATIONS)	TOTAL, ALL ACTIVITIES	ACADEMIC SCIENCE/ENGINEERING							NON-SCIENCE/ENGINEERING
			TOTAL ACADEMIC SCIENCE/ENGINEERING	RESEARCH AND DEVELOPMENT	R&D PLANT	FACILITIES FOR INSTRUCTION IN SCIENCE/ENG.	FELLOWSHIPS, TRAINEESHIPS, AND TRAINING GRANTS	GENERAL SUPPORT SCIENCE/ENGINEERING	OTHER SCIENCE/ENGINEERING	
51	NEW MEXICO STATE UNIV	54,855	47,228	39,297	0	0	131	565	7,235	7,627
52	UNIV OF CAL DAVIS	54,182	45,798	43,618	85	0	1,520	435	140	8,384
53	OREGON STATE UNIVERSITY	50,152	41,922	37,097	571	0	308	246	3,700	8,230
54	VANDERBILT UNIVERSITY	50,141	47,093	43,990	0	0	2,669	434	0	3,048
55	UNIVERSITY OF NEW MEXICO	49,599	36,910	34,947	0	0	179	1,485	299	12,689
56	UNIVERSITY OF MIAMI	49,347	39,624	37,618	512	0	1,083	329	82	9,723
57	PRINCETON UNIVERSITY	48,805	46,084	42,674	398	0	2,556	456	0	2,721
58	UNIVERSITY OF VIRGINIA	48,736	42,798	39,136	0	0	2,926	735	1	5,938
59	UNIVERSITY OF GEORGIA	48,437	43,022	32,267	237	0	270	148	10,100	5,415
60	BAYLOR COL OF MEDICINE	48,191	46,904	43,801	543	0	1,647	636	277	1,287
TOTAL 1ST 60 INSTITUTIONS		5,852,571	4,990,030	4,515,733	58,440	213	193,531	48,703	173,410	862,541
61	UNIVERSITY OF KENTUCKY	47,943	32,564	22,394	0	0	329	358	9,483	15,379
62	LOUISIANA STATE UNIV	46,322	39,336	30,986	0	0	533	816	7,001	6,986
63	U TEX HLTH SCI CTR DALLAS	46,132	43,274	40,330	0	0	2,030	687	227	2,858
64	N C STATE UNIV AT RALEIGH	45,791	41,010	27,482	0	0	532	122	12,874	4,781
65	IOWA ST U OF SCI & TECH	43,472	30,373	21,207	0	0	183	475	8,508	13,099
66	UNIV OF MASS AT AMHERST	43,338	30,070	26,190	0	0	383	107	3,390	13,268
67	UNIVERSITY OF CONNECTICUT	43,285	37,018	32,604	0	0	1,281	888	2,245	6,267
68	UNIV OF CAL IRVINE	42,356	35,662	33,607	129	0	1,349	570	7	6,694
69	UNIV OF ILL CHICAGO	42,064	30,887	29,209	0	0	485	628	565	11,177
70	UNIVERSITY OF CINCINNATI	41,711	31,382	29,770	0	0	924	688	0	10,329
TOTAL 1ST 70 INSTITUTIONS		6,294,985	5,341,606	4,809,512	58,569	213	201,560	54,042	217,710	953,379
71	SUNY AT STONY BROOK	39,805	37,616	36,102	0	0	892	622	0	2,189
72	BROWN UNIVERSITY	39,719	36,090	29,987	4,961	0	565	497	80	3,629
73	RUTGERS THE ST UNIV OF NJ	39,688	28,227	23,092	0	0	546	887	3,702	11,461
74	UNIV OF MISSOURI COLUMBIA	39,373	31,714	21,997	0	0	652	270	8,795	7,659
75	UNIV OF HAWAII-MANOA	38,815	31,981	27,758	991	0	323	767	2,142	6,834
76	COLORADO STATE UNIVERSITY	38,221	31,814	27,303	0	0	810	379	3,322	6,407
77	PUERTO RICO JR COL	38,023	0	0	0	0	0	0	0	38,023
78	WOODS HOLE OCNGRPHIC INST	37,318	37,318	36,300	1,018	0	0	0	0	0
79	EMORY UNIVERSITY	36,935	32,756	30,981	49	0	598	1,128	0	4,179
80	UNIV OF CAL SANTA BARBARA	36,654	29,468	28,880	0	0	266	311	11	7,186
TOTAL 1ST 80 INSTITUTIONS		6,679,536	5,638,590	5,071,912	65,588	213	206,212	58,903	235,762	1,040,946
81	VA POLYTECH INST & ST U	36,505	32,327	23,363	100	0	168	109	8,587	4,178
82	UNIVERSITY OF OREGON MAIN	36,229	22,424	13,004	8,179	0	550	691	0	13,805
83	VIRGINIA COMMONWLTH UNIV	36,164	28,429	26,598	0	0	1,247	584	0	7,735
84	ROCKEFELLER UNIVERSITY	35,755	35,755	33,940	0	0	1,512	303	0	0
85	ROCHESTER INST TECHNOLOGY	35,653	1,447	1,397	0	50	0	0	0	34,206
86	U TENNESSEE KNOXVILLE	34,565	25,995	15,497	0	0	705	143	9,650	8,570
87	UTAH STATE UNIVERSITY	34,498	24,074	21,812	0	0	25	21	2,216	10,424
88	UNIVERSITY OF KANSAS	33,618	23,937	20,183	1,828	0	859	644	423	9,681
89	OREGON HLTH SCIENCES UNIV	33,322	15,279	14,064	250	0	712	253	0	18,043
90	TEMPLE UNIVERSITY	32,235	18,921	17,477	230	0	916	298	0	13,314
TOTAL 1ST 90 INSTITUTIONS		7,028,080	5,867,178	5,259,247	76,175	263	212,906	61,949	256,638	1,160,902
91	CUNY MT SINAI SCH OF MED	32,198	30,872	28,963	0	0	1,129	539	241	1,326
92	TUFTS UNIVERSITY	31,226	28,427	27,475	0	0	467	459	26	2,799
93	OKLAHOMA STATE UNIVERSITY	30,798	24,275	14,127	0	0	211	13	9,924	6,523
94	UNIV OF VT & ST AGRIC COL	29,994	24,377	21,967	0	0	445	294	1,671	5,617
95	WASHINGTON STATE UNIV	29,772	22,027	17,041	0	0	274	293	4,419	7,745
96	UNIV OF MD BALT PROF SCH	28,961	26,450	24,574	0	0	427	637	812	2,511
97	WAYNE STATE UNIVERSITY	28,395	17,172	15,015	51	0	658	1,448	0	11,223
98	SUNY AT BUFFALO	28,270	24,820	22,668	0	0	803	417	932	3,450
99	FLORIDA STATE UNIVERSITY	28,120	21,823	21,418	0	0	281	93	31	6,297
100	AUBURN UNIVERSITY	27,377	20,736	12,394	0	0	108	0	8,234	6,641
TOTAL 1ST 100 INSTITUTIONS		7,323,191	6,108,157	5,464,889	76,226	263	217,709	66,142	282,928	1,215,034

SOURCE: NATIONAL SCIENCE FOUNDATION, SRS

TABLE 11. -- FEDERAL OBLIGATIONS FOR RESEARCH & DEVELOPMENT TO THE 100 UNIVERSITIES AND COLLEGES RECEIVING THE LARGEST AMOUNTS BY AGENCY: FISCAL YEAR 1986 1/

(DOLLARS IN THOUSANDS)

RANK	INSTITUTION (RANKED BY AMOUNT RECEIVED)	TOTAL	USDA	COM	DOD	ED	DOE	EPA	HHS	INT	NASA	NSF	OTHER 2/
	TOTAL, ALL INSTITUTIONS	6,538,280	277,126	68,281	1,149,664	72,202	346,928	67,945	3,212,140	40,860	254,027	983,933	65,174
1	JOHNS HOPKINS UNIVERSITY	445,718	137	168	318,504	1,303	2,699	528	110,451	144	3,396	8,388	0
2	MASS INST OF TECHNOLOGY	188,120	0	2,337	46,940	141	44,938	352	43,593	700	12,356	36,083	680
3	STANFORD UNIVERSITY	180,186	305	0	40,846	155	14,090	1,135	81,052	57	17,936	24,610	0
4	UNIVERSITY OF WASHINGTON	146,718	1,347	4,071	20,827	886	5,807	970	86,273	615	3,598	22,314	10
5	UNIV OF CAL SAN DIEGO	133,243	195	1,831	33,174	0	1,925	89	57,946	537	8,674	28,872	0
6	COLUMBIA UNIV MAIN DIV	127,131	0	215	11,279	101	4,765	0	77,837	1,576	2,704	25,830	2,824
7	UNIV OF CAL LOS ANGELES	125,483	382	259	9,075	2,440	13,754	854	78,188	52	4,483	15,996	0
8	UNIV OF WIS-MADISON	120,626	8,197	1,857	6,950	0	10,508	679	63,259	268	8,777	20,131	0
9	CORNELL UNIVERSITY	112,707	7,801	67	10,622	0	3,648	1,084	51,373	789	2,798	34,525	0
10	YALE UNIVERSITY	111,687	12	0	6,085	165	7,320	0	88,315	0	791	8,999	0
	TOTAL 1ST 10 INSTITUTIONS	1,691,619	18,376	10,805	504,302	5,191	109,454	5,691	738,287	4,738	65,513	225,748	3,514
11	UNIVERSITY OF MICHIGAN	111,232	433	1,200	8,117	1,869	4,408	1,127	63,628	10	10,865	18,896	679
12	HARVARD UNIVERSITY	110,356	160	427	8,323	1,971	4,238	891	76,656	167	2,245	14,686	592
13	UNIV OF CAL SAN FRANCISCO	104,453	0	0	3,346	540	2,232	0	95,958	0	753	1,624	0
14	UNIV OF PENNSYLVANIA	103,487	420	0	6,305	79	5,073	0	77,631	0	362	13,461	156
15	UNIVERSITY OF MINNESOTA	100,898	6,249	713	3,525	1,234	4,722	1,830	66,285	499	1,586	14,245	10
16	UNIV OF CAL BERKELEY	96,834	7,005	83	15,590	800	2,786	347	32,916	517	9,683	25,820	1,287
17	UNIV OF ILL URBANA	88,986	6,934	68	14,353	0	9,360	419	15,930	414	2,527	35,955	3,026
18	PENNSYLVANIA STATE UNIV	87,041	7,191	257	38,925	338	2,937	258	21,827	3,111	2,746	9,156	295
19	UNIV OF SOUTHERN CAL	77,533	4	936	14,045	0	1,532	164	50,930	430	982	8,500	10
20	UNIV OF TEXAS AT AUSTIN	74,028	430	0	39,223	117	7,661	1,007	9,377	224	3,429	12,560	0
	TOTAL 1ST 20 INSTITUTIONS	2,646,467	47,202	14,489	656,054	12,139	154,403	11,734	1,249,425	10,110	100,691	380,651	9,569
21	UNIVERSITY OF COLORADO	73,630	9	4,123	4,989	101	2,798	612	39,441	291	9,531	11,695	40
22	WASHINGTON UNIVERSITY	72,750	240	0	869	0	1,056	51	64,287	0	2,229	4,018	0
23	UNIVERSITY OF CHICAGO	71,535	215	88	1,440	79	3,432	0	45,407	0	5,573	15,151	150
24	UNIVERSITY OF ROCHESTER	71,521	0	0	5,012	300	11,746	275	46,540	0	154	7,403	91
25	UNIV OF NC AT CHAPEL HILL	70,526	58	80	3,510	0	845	2,553	56,758	0	363	6,159	200
26	DUKE UNIVERSITY	70,034	402	61	2,586	0	2,279	1,567	56,056	9	473	6,601	0
27	NEW YORK UNIVERSITY	68,372	0	0	4,081	1,598	4,748	896	45,547	0	499	6,428	4,575
28	CARNEGIE-MELLON UNIV	59,854	0	42	36,281	0	3,547	107	5,215	159	545	13,600	358
29	CALIFORNIA INST OF TECH	59,707	145	156	11,591	0	7,881	209	9,879	1,764	5,958	22,124	0
30	UNIVERSITY OF PITTSBURGH	59,373	0	125	3,848	1,477	1,825	903	43,793	0	588	6,814	0
	TOTAL 1ST 30 INSTITUTIONS	3,323,769	48,271	19,164	730,261	15,694	194,560	18,907	1,662,348	12,333	126,604	480,644	14,983
31	YESHIVA UNIVERSITY	58,518	0	0	0	1,323	0	0	56,330	0	0	865	0
32	OHIO STATE UNIVERSITY	58,078	6,863	581	4,906	5,400	2,322	990	19,561	379	2,509	10,167	4,400
33	UNIVERSITY OF UTAH	55,290	125	0	5,809	216	4,816	312	33,346	1,060	519	7,087	0
34	UNIV OF MD COLLEGE PARK	53,906	2,614	3,210	13,919	2,174	5,045	249	3,272	189	7,693	14,741	800
35	UNIVERSITY OF IOWA	52,226	111	41	3,178	265	77	594	40,254	144	4,001	3,561	0
36	UNIVERSITY OF ARIZONA	51,123	3,085	399	5,010	678	734	1,040	23,830	583	6,037	9,255	472
37	CASE WESTERN RESERVE UNIV	49,331	531	38	3,829	325	680	167	34,163	10	4,630	4,198	760
38	UNIVERSITY OF FLORIDA	48,911	8,075	2,260	6,796	74	2,648	902	21,024	634	989	5,509	0
39	MICHIGAN STATE UNIVERSITY	48,740	7,621	42	2,060	2,571	2,792	484	13,367	221	467	14,224	4,891
40	BOSTON UNIVERSITY	48,518	145	0	5,183	1,153	738	103	37,284	0	431	3,481	0
	TOTAL 1ST 40 INSTITUTIONS	3,848,410	77,441	25,735	780,951	29,873	214,412	23,748	1,946,779	15,553	153,880	553,732	26,306
41	PURDUE UNIVERSITY	46,827	5,515	111	6,776	207	3,814	225	13,348	256	1,875	14,695	5
42	GEORGIA INSTITUTE OF TECH	46,557	0	188	34,100	0	1,161	918	2,009	554	2,076	3,776	1,775
43	UNIV ALABAMA BIRMINGHAM	45,856	338	0	698	1,325	0	0	40,830	0	1,787	878	0
44	VANDERBILT UNIVERSITY	43,990	0	0	1,146	717	444	251	37,893	80	1,391	2,068	0
45	BAYLOR COL OF MEDICINE	43,801	100	0	1,015	824	0	50	41,183	0	285	344	0
46	UNIV OF CAL DAVIS	43,618	4,067	0	2,024	550	4,054	229	22,144	335	843	6,792	2,580
47	NORTHWESTERN UNIVERSITY	43,609	200	89	4,034	1,764	2,720	40	24,068	0	456	10,210	28
48	PRINCETON UNIVERSITY	42,674	0	395	10,064	0	4,778	0	9,658	0	2,981	14,731	67
49	INDIANA UNIVERSITY	41,879	125	0	1,688	154	2,318	230	23,064	67	461	13,752	20
50	U TEX HLTH SCI CTR DALLAS	40,330	0	0	94	0	0	0	38,805	0	1,027	404	0
	TOTAL 1ST 50 INSTITUTIONS	4,287,551	87,786	26,518	842,590	35,414	233,701	25,691	2,199,781	16,845	167,062	621,382	30,781

SEE FOOTNOTES AT END OF TABLE.

TABLE 11. -- FEDERAL OBLIGATIONS FOR RESEARCH & DEVELOPMENT TO THE 100 UNIVERSITIES AND COLLEGES RECEIVING THE LARGEST AMOUNTS BY AGENCY: FISCAL YEAR 1986 1/

CONTINUED

(DOLLARS IN THOUSANDS)

RANK	INSTITUTION (RANKED BY AMOUNT RECEIVED)	TOTAL	USDA	COM	DOD	ED	DOE	EPA	HHS	INT	NASA	NSF	OTHER 2/
51	NEW MEXICO STATE UNIV	39,297	3,336	0	26,376	0	1,237	228	1,439	432	5,035	1,214	0
52	UNIVERSITY OF VIRGINIA	39,136	112	1,701	2,385	2,067	2,231	371	24,379	30	1,148	4,712	0
53	UNIVERSITY OF MIAMI	37,618	80	790	3,451	73	223	0	25,764	0	844	6,393	0
54	OREGON STATE UNIVERSITY	37,097	7,787	4,800	4,922	0	546	1,651	6,536	1,081	728	7,606	1,440
55	WOODS HOLE OCNGRPHIC INST	36,300	0	981	15,825	0	565	189	195	436	118	17,991	0
56	SUNY AT STONY BROOK	36,102	0	2,076	817	0	2,768	0	17,085	0	842	12,514	0
57	TEXAS A & M UNIVERSITY	35,891	9,007	2,028	5,898	30	2,623	397	5,141	285	1,579	8,237	666
58	UNIVERSITY OF NEW MEXICO	34,947	0	0	22,356	0	1,435	0	8,724	0	526	1,906	0
59	ROCKEFELLER UNIVERSITY	33,940	90	0	658	0	1,142	72	30,543	0	112	1,323	0
60	UNIV OF CAL IRVINE	33,607	126	0	4,025	0	2,872	362	17,822	0	1,000	7,400	0
TOTAL 1ST 60 INSTITUTIONS		4,651,486	108,324	38,894	929,303	37,584	249,343	28,961	2,337,409	19,109	178,994	690,678	32,887
61	UNIVERSITY OF CONNECTICUT	32,604	1,288	2,006	1,759	750	428	312	23,548	124	207	2,182	0
62	UNIVERSITY OF GEORGIA	32,267	5,543	1,200	988	0	7,703	1,209	6,635	77	150	6,362	2,400
63	LOUISIANA STATE UNIV	30,986	4,132	749	3,521	0	1,160	835	16,702	897	186	2,755	49
64	EMORY UNIVERSITY	30,981	0	0	668	700	147	0	28,022	0	149	1,295	0
65	BROWN UNIVERSITY	29,987	80	205	6,512	0	2,697	0	9,621	209	1,390	9,273	0
66	UNIVERSITY OF CINCINNATI	29,770	0	0	1,503	49	301	1,474	23,422	0	856	2,165	0
67	UNIV OF ILL CHICAGO	29,209	130	46	4,752	239	749	451	22,470	0	209	126	37
68	CUNY MT SINAI SCH OF MED	28,963	0	0	0	0	77	416	27,969	0	50	451	0
69	UNIV OF CAL SANTA BARBARA	28,880	115	0	8,603	762	2,947	574	3,489	280	980	10,802	328
70	UNIV OF HAWAII-MANOA	27,758	3,059	2,531	1,643	799	1,390	0	5,590	114	4,485	7,177	970
TOTAL 1ST 70 INSTITUTIONS		4,952,891	122,671	45,631	959,252	40,883	266,942	34,232	2,504,877	20,810	187,656	733,266	36,671
71	N C STATE UNIV AT RALEIGH	27,482	7,813	1,197	5,242	0	1,019	825	2,820	207	847	4,877	2,635
72	TUFTS UNIVERSITY	27,475	159	0	616	0	954	2,731	21,287	40	113	1,487	88
73	COLORADO STATE UNIVERSITY	27,303	4,026	1,441	3,083	0	1,172	1,412	6,440	642	994	7,493	600
74	VIRGINIA COMMONWLTH UNIV	26,598	0	0	1,239	627	102	21	23,626	0	337	646	0
75	UNIV OF MASS AT AMHERST	26,190	2,646	0	8,707	177	1,345	60	3,261	180	523	9,141	150
76	UNIV OF MD BALT PROF SCH	24,574	0	0	1,560	0	268	0	22,454	0	0	292	0
77	VA POLYTECH INST & ST U	23,363	5,008	75	5,133	0	2,650	415	2,211	1,807	2,221	3,234	609
78	RUTGERS THE ST UNIV OF NJ	23,092	2,993	185	1,946	1,323	362	236	8,860	352	101	6,619	115
79	SUNY AT BUFFALO	22,668	0	0	1,648	0	526	0	15,920	0	417	4,157	0
80	UNIVERSITY OF DAYTON	22,612	90	54	21,297	0	153	0	70	0	531	405	12
TOTAL 1ST 80 INSTITUTIONS		5,204,248	145,406	48,583	1,009,723	43,010	275,493	39,932	2,611,826	24,038	193,740	771,617	40,880
81	U TEX HLTH SCI CTR HOUSTN	22,588	0	0	401	0	260	106	20,956	0	865	0	0
82	UNIVERSITY OF KENTUCKY	22,394	5,523	80	977	227	435	206	11,585	256	170	2,848	87
83	UNIV OF MISSOURI COLUMBIA	21,997	6,096	423	1,020	0	604	179	9,630	114	0	2,171	1,760
84	UNIV OF VT & ST AGRIC COL	21,967	1,888	0	538	839	169	162	17,192	131	7	1,041	0
85	UTAH STATE UNIVERSITY	21,812	2,416	3	12,408	600	88	847	802	645	1,420	2,258	325
86	U TEX HLTH SCI CTR S ANTO	21,504	0	0	579	0	0	0	20,385	0	0	540	0
87	FLORIDA STATE UNIVERSITY	21,418	21	485	2,054	1	9,757	277	3,025	0	564	5,234	0
88	IOWA ST U OF SCI & TECH	21,207	6,695	90	7,260	166	585	247	2,373	321	338	3,132	0
89	U TEXAS SYSTEM CANCER CTR	20,576	0	0	0	0	0	0	20,369	0	0	207	0
90	UNIVERSITY OF KANSAS	20,183	187	175	2,070	1,716	334	317	12,278	0	886	2,147	73
TOTAL 1ST 90 INSTITUTIONS		5,419,894	168,232	49,839	1,037,030	46,559	287,725	42,273	2,730,421	25,505	197,990	791,195	43,125
91	U MASS MED SCHL WORCESTER	19,699	45	0	948	0	101	164	18,068	0	0	373	0
92	DARTMOUTH COLLEGE	19,306	175	0	2,146	0	424	202	13,597	0	383	2,354	25
93	WAKE FOREST UNIVERSITY	17,480	0	0	182	0	90	0	16,445	0	212	551	0
94	U TEX MED BRNCH GALVESTON	17,479	0	0	525	83	0	128	16,251	0	248	244	0
95	TEMPLE UNIVERSITY	17,477	220	0	450	361	330	0	14,721	0	0	1,395	0
96	WASHINGTON STATE UNIV	17,041	7,128	0	1,547	101	163	507	4,168	159	124	3,144	0
97	GEORGE WASHINGTON UNIV	16,359	0	78	804	906	402	0	10,712	0	2,053	1,375	29
98	U TENNESSEE KNOXVILLE	15,497	4,584	0	2,076	0	1,648	491	3,265	114	1,017	2,191	111
99	SUNY AT ALBANY	15,443	64	0	3,033	0	379	3,005	4,617	0	740	3,520	85
100	GEORGETOWN UNIVERSITY	15,023	223	41	1,791	0	72	270	11,618	0	0	1,008	0
TOTAL 1ST 100 INSTITUTIONS		5,590,698	180,671	49,958	1,050,532	48,010	291,334	47,040	2,843,883	25,778	202,767	807,350	43,375

1/ DOES NOT INCLUDE R&D OBLIGATIONS TO UNIVERSITY-ASSOCIATED FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTERS (FFRDC'S).

2/ INCLUDES DOT, AID, HUD, LABOR, AND NRC.

SOURCE: NATIONAL SCIENCE FOUNDATION, SRS

TABLE 12. -- FEDERAL OBLIGATIONS TO UNIVERSITIES AND COLLEGES FOR RESEARCH AND DEVELOPMENT BY GEOGRAPHIC DIVISION AND STATE: FISCAL YEARS 1979-86

(DOLLARS IN THOUSANDS)

GEOGRAPHIC DIVISION AND STATE	1979	1980	1981	1982	1983	1984	1985	1986
UNITED STATES, TOTAL	3,873,514	4,159,857	4,410,199	4,553,755	5,023,677	5,634,400	6,368,608	6,538,280
NEW ENGLAND, TOTAL	420,133	486,294	514,219	546,699	614,331	666,700	728,414	747,833
CONNECTICUT	83,995	90,055	97,599	106,116	116,971	128,786	144,455	146,545
MAINE	3,837	4,769	5,316	5,409	6,476	7,999	7,166	6,449
MASSACHUSETTS	279,697	332,727	354,577	373,011	424,213	453,875	487,618	498,399
NEW HAMPSHIRE	14,917	17,780	17,283	16,958	19,436	22,409	27,750	30,564
RHODE ISLAND	25,746	28,742	27,351	32,156	33,879	35,219	42,131	43,646
VERMONT	11,941	12,221	12,093	13,049	13,356	18,412	19,294	22,230
MIDDLE ATLANTIC, TOTAL	638,048	702,123	715,602	758,311	863,889	941,878	1,108,296	1,130,986
NEW JERSEY	46,876	50,648	56,744	56,207	61,998	71,331	83,023	86,000
NEW YORK	395,221	437,185	435,024	465,860	527,872	581,251	680,273	671,899
PENNSYLVANIA	195,951	214,290	223,834	236,244	274,019	289,296	345,000	373,087
EAST NORTH CENTRAL, TOTAL	528,883	580,990	612,214	629,295	682,781	747,405	862,892	873,904
ILLINOIS	160,232	173,627	180,144	190,913	209,434	226,377	260,394	262,640
INDIANA	59,515	71,328	79,076	76,181	77,043	87,369	101,734	100,144
MICHIGAN	107,714	117,877	125,585	133,673	144,557	157,889	178,920	183,814
OHIO	107,377	117,652	124,217	129,207	138,882	148,999	171,831	179,050
WISCONSIN	94,045	100,506	103,192	99,321	112,865	126,771	150,013	148,256
WEST NORTH CENTRAL, TOTAL	247,065	260,979	256,643	261,280	267,621	309,033	359,097	360,139
IOWA	44,958	45,287	46,221	47,898	53,229	61,933	69,926	74,279
KANSAS	28,960	30,259	26,101	24,678	24,765	25,845	31,198	33,239
MINNESOTA	65,228	76,527	72,489	79,582	74,279	85,132	104,471	102,293
MISSOURI	76,908	80,172	80,979	80,978	86,389	94,072	108,629	111,289
NEBRASKA	19,909	14,863	15,871	15,572	14,714	23,816	26,979	24,524
NORTH DAKOTA	7,347	9,371	10,318	7,685	10,031	13,534	12,625	9,479
SOUTH DAKOTA	3,755	4,500	4,664	4,887	4,214	4,701	5,269	5,036
SOUTH ATLANTIC, TOTAL	687,809	684,057	833,984	816,790	884,122	1,053,178	1,137,253	1,180,861
DELAWARE	9,137	8,938	8,602	8,191	9,230	10,123	12,221	12,863
DISTRICT OF COLUMBIA	34,539	38,844	37,183	42,472	54,379	46,096	56,320	49,955
FLORIDA	67,213	69,501	78,868	84,924	90,328	91,555	113,479	121,231
GEORGIA	61,638	70,763	78,265	90,891	101,043	98,686	118,087	127,973
MARYLAND	317,361	286,887	414,547	366,789	377,480	532,841	506,892	530,344
NORTH CAROLINA	111,071	115,678	121,701	125,749	141,393	155,208	184,060	194,999
SOUTH CAROLINA	18,341	21,341	22,387	21,801	23,900	24,424	33,188	32,726
VIRGINIA	60,050	63,167	64,336	67,678	77,653	83,170	103,152	101,062
WEST VIRGINIA	8,459	8,938	8,095	8,295	8,716	11,075	9,854	9,708
EAST SOUTH CENTRAL, TOTAL	131,785	135,498	140,092	142,906	158,205	165,738	205,350	219,146
ALABAMA	41,257	44,264	46,269	45,746	53,565	60,489	70,944	79,921
KENTUCKY	18,755	19,409	18,679	20,526	19,211	21,281	27,186	27,974
MISSISSIPPI	19,056	14,570	15,842	18,207	18,659	18,103	25,150	22,979
TENNESSEE	52,717	57,255	59,302	58,427	66,770	65,865	82,070	88,272
WEST SOUTH CENTRAL, TOTAL	252,257	277,213	287,594	300,567	318,708	356,507	420,655	431,273
ARKANSAS	8,569	8,878	9,213	11,112	10,411	11,935	15,323	14,527
LOUISIANA	27,064	31,182	31,015	34,475	36,213	40,098	51,373	47,715
OKLAHOMA	16,155	21,902	18,606	22,795	21,429	24,010	27,880	29,468
TEXAS	200,469	215,251	228,760	232,185	250,655	280,464	326,079	339,563
MOUNTAIN, TOTAL	210,529	218,781	234,379	253,635	276,696	328,684	345,949	366,578
ARIZONA	35,947	41,648	42,873	43,431	49,004	54,295	64,672	65,808
COLORADO	67,030	77,876	76,974	77,139	83,570	97,761	104,640	108,473
IDAHO	4,178	4,725	5,746	4,834	5,211	15,765	5,757	5,296
MONTANA	6,595	6,609	5,947	7,445	6,823	7,014	6,549	8,015
NEVADA	4,852	4,880	6,643	7,644	7,875	7,299	10,189	10,895
NEW MEXICO	34,460	33,632	33,661	47,944	53,631	65,427	60,630	79,466
UTAH	49,250	43,788	54,993	58,129	59,164	65,774	76,557	81,627
WYOMING	8,217	5,623	7,542	7,069	11,418	15,349	16,955	6,998
PACIFIC, TOTAL	747,212	803,885	804,596	832,685	945,486	1,055,013	1,188,994	1,214,448
ALASKA	22,036	18,734	14,902	11,206	8,196	10,611	12,214	14,645
CALIFORNIA	553,577	588,448	602,891	627,600	723,896	792,770	908,141	934,230
HAWAII	28,070	29,990	24,048	24,493	25,860	24,691	33,656	29,196
OREGON	43,768	51,372	49,092	55,685	56,810	72,618	70,068	71,764
WASHINGTON	99,761	115,341	113,663	113,701	130,724	154,323	164,915	164,613
OUTLYING AREAS, TOTAL	9,793	10,037	10,876	11,587	11,838	10,264	11,708	13,112
GUAM	628	679	738	987	1,080	1,038	1,138	1,165
PUERTO RICO	8,377	8,708	9,260	8,576	8,496	8,337	9,045	10,268
AMERICAN SAMOA	0	0	0	555	584	200	115	290
VIRGIN ISLANDS	758	650	878	890	1,067	599	931	916
TRUST TERRITORY PAC ISL	30	0	0	579	611	90	479	473

NOTE: DATA FOR EACH YEAR REFLECT SUPPORT FROM THE AGENCIES INCLUDED IN THE SURVEY SYSTEM FOR THAT YEAR.

SOURCE: NATIONAL SCIENCE FOUNDATION, SRS

TABLE 13. -- FEDERAL OBLIGATIONS TO UNIVERSITIES AND COLLEGES FOR RESEARCH AND DEVELOPMENT BY DETAILED FIELD: FISCAL YEARS 1979-86

(DOLLARS IN THOUSANDS)

FIELD OF SCIENCE/ENGINEERING	1979	1980	1981	1982	1983	1984	1985	1986
TOTAL, ALL FIELDS	3,873,514	4,159,857	4,410,199	4,553,755	5,023,677	5,634,400	6,368,608	6,538,280
ENGINEERING, TOTAL	574,747	612,456	792,223	804,054	913,604	1,034,194	1,076,219	1,100,065
AERONAUTICAL	24,883	28,044	31,056	35,530	39,765	40,678	39,903	42,257
ASTRONAUTICAL	3,720	4,634	4,875	8,569	16,373	12,405	14,765	24,147
CHEMICAL	20,866	22,210	27,667	30,274	37,685	50,677	68,602	50,379
CIVIL	37,521	48,130	58,300	38,745	52,231	55,843	45,368	35,402
ELECTRICAL	82,158	86,916	115,011	139,442	170,381	161,336	231,457	212,175
MECHANICAL	26,013	42,593	37,954	37,836	42,577	45,952	53,214	56,416
METALLURGY & MATERIALS	36,899	63,057	52,815	63,998	66,146	75,341	80,416	99,002
ENGINEERING, NEC	342,687	316,872	464,545	449,660	488,446	591,962	542,494	580,287
ALL SCIENCES, TOTAL	3,298,767	3,547,401	3,617,976	3,749,701	4,110,073	4,600,206	5,292,389	5,438,215
PHYSICAL SCIENCES, TOTAL	462,867	507,884	500,657	563,440	621,410	715,948	789,184	770,254
ASTRONOMY	45,036	52,736	54,835	54,001	62,278	78,124	78,654	78,435
CHEMISTRY	155,806	170,048	165,189	183,231	192,171	230,689	256,156	255,593
PHYSICS	224,197	249,661	250,342	284,711	325,998	359,757	397,061	379,289
PHYSICAL SCIENCES, NEC	37,828	35,439	30,291	41,497	40,963	47,378	57,313	56,937
MATHEMATICAL/COMPUTER SCIENCES, TOTAL	71,609	91,572	91,161	102,531	117,540	135,103	173,314	178,999
MATHEMATICAL SCIENCES	41,289	53,987	53,668	55,998	63,087	75,176	94,680	96,405
COMPUTER SCIENCES	29,091	36,140	34,861	44,844	52,727	58,667	78,634	79,413
MATH/COMPUTER SCI, NEC 1/	1,229	1,445	2,632	1,689	1,726	1,260	N/A	3,181
ENVIRONMENTAL SCIENCES, TOTAL	339,821	379,453	330,079	344,313	372,236	398,538	453,789	468,882
ATMOSPHERIC SCIENCES	91,222	86,486	95,112	94,463	103,851	114,183	135,562	124,657
GEOLOGICAL SCIENCES	118,176	109,523	101,207	101,005	101,570	100,901	116,850	118,401
OCEANOGRAPHY	74,789	92,079	91,863	102,340	120,448	136,426	138,732	121,855
ENVIRONMENTAL SCIENCES, NEC	55,634	91,365	41,897	46,505	46,367	47,028	62,645	103,969
LIFE SCIENCES, TOTAL	2,016,524	2,137,751	2,290,587	2,380,991	2,617,274	2,932,582	3,353,349	3,450,126
BIOLOGICAL (EXCL. ENV BIO)	1,054,787	1,085,602	1,192,756	1,201,934	1,339,982	1,548,809	1,766,034	1,836,528
ENVIRONMENTAL BIOLOGY	N/A	13,137	14,636	6,448	8,073	80,595	80,383	86,904
AGRICULTURAL	N/A	111,739	134,660	162,192	170,180	158,369	174,513	147,717
MEDICAL	801,172	885,898	904,963	969,253	1,050,458	1,120,032	1,288,203	1,319,873
LIFE SCIENCES, NEC	42,750	41,375	43,379	41,164	48,581	24,777	44,216	59,104
PSYCHOLOGY, TOTAL	91,357	86,459	87,734	84,406	93,849	109,787	132,746	138,338
BIOLOGICAL ASPECTS	25,164	28,269	26,273	24,735	24,760	33,515	39,700	39,049
SOCIAL ASPECTS	30,600	31,129	28,846	25,166	27,787	30,261	36,205	38,589
PSYCHOLOGY, NEC	35,593	27,061	32,615	34,505	41,302	46,011	56,841	60,700
SOCIAL SCIENCES, TOTAL	207,258	203,948	197,695	134,323	175,127	162,492	175,909	173,248
ANTHROPOLOGY	7,115	7,757	5,543	11,994	12,678	5,529	6,053	6,455
ECONOMICS	52,239	51,414	56,704	52,382	52,756	37,675	45,292	43,764
HISTORY	1,451	1,688	1,069	3,200	4,623	1,038	1,494	1,508
LINGUISTICS	2,462	2,997	2,745	3,629	3,419	2,967	3,196	2,481
POLITICAL SCIENCE	8,063	5,890	5,122	10,681	17,149	7,965	6,216	5,003
SOCIOLOGY	32,217	34,903	38,136	21,142	29,890	33,232	34,887	34,580
SOCIAL SCIENCES, NEC	103,711	99,299	88,376	31,295	54,612	74,086	78,771	79,457
OTHER SCIENCES, NEC	109,331	140,334	120,063	139,697	112,637	145,756	214,098	258,368

1/ DATA NOT COLLECTED IN FY 1985. INCLUDED UNDER "MATHEMATICAL SCIENCES."

NOTE: DATA FOR EACH YEAR REFLECT SUPPORT FROM THE AGENCIES INCLUDED IN THE SURVEY SYSTEM FOR THAT YEAR.

SOURCE: NATIONAL SCIENCE FOUNDATION, SRS

TABLE 14. -- FEDERAL OBLIGATIONS TO UNIVERSITIES AND COLLEGES
BY AGENCY AND TYPE OF ACTIVITY: FISCAL YEAR 1986

(DOLLARS IN THOUSANDS)

AGENCY	TOTAL OBLIGATIONS	ACADEMIC SCIENCE/ENGINEERING							NON-SCIENCE/ ENGINEERING ACTIVITIES
		TOTAL ACADEMIC SCIENCE/ ENGINEERING	RESEARCH AND DEVELOPMENT	R&D PLANT	FACILITIES FOR INSTRUCTION IN SCIENCE & ENGINEERING	FELLOWSHIPS, TRAINEESHIPS, & TRAINING GRANTS	GENERAL SUPPORT FOR SCIENCE/ ENGINEERING	OTHER SCIENCE/ ENGINEERING ACTIVITIES	
TOTAL	11,584,087	7,399,121	6,538,280	105,827	4,990	246,196	111,130	392,698	4,184,966
DEPARTMENT OF AGRICULTURE	611,216	607,707	277,126	9,128	0	4,679	0	316,774	3,509
DEPARTMENT OF COMMERCE	70,272	70,272	68,281	1,192	0	0	37	762	0
DEPARTMENT OF DEFENSE, TOTAL	1,194,262	1,186,413	1,149,664	0	0	518	2,128	34,103	7,849
ARMY	197,137	195,531	179,754	0	0	400	2,089	13,288	1,606
NAVY	713,342	709,415	706,414	0	0	118	0	2,883	3,927
AIR FORCE	249,063	249,063	234,982	0	0	0	39	14,042	0
OTHER DOD	34,720	32,404	28,514	0	0	0	0	3,890	2,316
DEPARTMENT OF EDUCATION	3,996,530	74,001	72,202	1,799	0	0	0	0	3,922,529
DEPARTMENT OF ENERGY	420,577	420,537	346,928	73,019	0	550	0	40	40
ENVIRONMENTAL PROTECTION AGENCY	70,754	70,754	67,945	0	0	2,809	0	0	0
DEPARTMENT OF HEALTH & HUMAN SERVICES	3,773,642	3,535,959	3,212,140	4,234	0	204,339	106,147	9,099	237,683
NATIONAL INSTITUTES OF HEALTH	3,274,178	3,274,178	2,969,333	4,234	0	185,365	106,147	9,099	0
HEALTH RESOURCES AND SERVICES ADMINISTRATION	212,447	6,312	6,312	0	0	0	0	0	206,135
ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION	229,938	216,477	198,859	0	0	17,618	0	0	13,461
CENTER FOR DISEASE CONTROL	16,915	7,189	7,189	0	0	0	0	0	9,726
FOOD AND DRUG ADMINISTRATION	4,581	4,581	4,581	0	0	0	0	0	0
OFFICE OF HUMAN DEVELOPMENT SERVICES	10,737	10,737	10,283	0	0	454	0	0	0
HEALTH CARE FINANCING ADMINISTRATION	5,029	5,029	5,029	0	0	0	0	0	0
SOCIAL SECURITY ADMINISTRATION	905	661	661	0	0	0	0	0	244
OFFICE OF THE ASSISTANT SECRETARY FOR HEALTH	18,007	9,890	8,988	0	0	902	0	0	8,117
OTHER DHHS	905	905	905	0	0	0	0	0	0
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT	332	132	132	0	0	0	0	0	200
DEPARTMENT OF THE INTERIOR	50,848	40,860	40,860	0	0	0	0	0	9,988
AGENCY FOR INTERNATIONAL DEVELOPMENT	44,302	44,302	44,302	0	0	0	0	0	0
DEPARTMENT OF LABOR	6,541	3,739	3,739	0	0	0	0	0	2,802
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	270,280	270,280	254,027	442	0	7,920	0	7,891	0
NATIONAL SCIENCE FOUNDATION	1,055,820	1,055,820	983,933	16,013	4,990	25,152	2,818	22,914	0
NUCLEAR REGULATORY COMMISSION	3,770	3,770	3,770	0	0	0	0	0	0
DEPARTMENT OF TRANSPORTATION	14,941	14,575	13,231	0	0	229	0	1,115	366

SOURCE: NATIONAL SCIENCE FOUNDATION, SRS

TABLE 15. -- SCIENCE/ENGINEERING GRADUATE STUDENTS IN ALL INSTITUTIONS BY HIGHEST DEGREE GRANTED AND FIELD: 1975-86

YEAR	TOTAL	ENGI-NEERING	PHYSICAL SCIENCES	ENVIRON-MENTAL SCIENCES	MATHE-MATICAL SCIENCES	COMPUTER SCIENCES	LIFE SCIENCES				PSYCHOL-OGY	SOCIAL SCIENCES
							TOTAL	AGRI-CULTURAL SCIENCES	BIO-LOGICAL SCIENCES	HEALTH SCIENCES		
	ALL INSTITUTIONS:											
1975	337,526	68,360	26,310	12,289	16,918	8,415	83,224	10,578	46,577	26,069	36,201	85,809
1976	344,119	66,771	26,631	13,034	17,092	8,627	87,879	11,154	47,932	28,793	37,469	86,616
1977	358,323	69,142	26,855	13,658	16,069	9,108	95,472	11,520	49,556	34,396	38,628	89,391
1978 1/	361,960	69,180	26,621	13,560	15,218	10,361	98,143	11,754	49,291	37,098	39,085	89,792
1979	373,198	72,262	26,700	13,854	15,063	11,690	99,827	12,069	48,503	39,255	39,786	94,016
1980	383,100	75,084	26,952	14,208	15,360	13,578	102,504	12,254	47,890	42,360	40,636	94,778
1981	391,640	80,479	27,382	14,422	15,915	16,437	103,124	12,100	46,979	44,045	40,691	93,190
1982	398,982	84,594	28,199	15,174	17,199	19,812	102,889	12,314	46,310	44,265	40,098	91,017
1983	413,355	93,155	29,475	15,609	17,443	23,616	103,702	12,290	46,028	45,384	41,104	89,251
1984	426,399	96,820	30,487	15,803	17,831	25,364	105,548	12,065	47,008	46,475	44,305	90,242
1985	434,622	99,941	31,194	15,741	18,106	29,522	106,653	11,475	47,576	47,602	44,060	89,405
1986	446,102	105,294	32,710	15,342	18,379	30,726	108,328	11,325	48,692	48,310	43,903	91,420
	DOCTORATE-GRANTING INSTITUTIONS:											
1975	293,754	64,579	24,529	10,961	14,391	6,952	73,601	10,072	40,940	22,589	26,923	71,818
1976	298,159	62,911	24,826	11,737	14,751	6,967	77,184	10,601	41,962	24,621	28,090	71,693
1977	306,569	64,423	24,816	12,301	13,894	7,232	83,344	10,947	43,157	29,240	28,058	72,501
1978	309,835	64,269	24,718	12,243	13,194	8,329	85,915	11,088	43,135	31,692	27,911	73,256
1979	320,580	67,152	24,924	12,575	13,180	9,488	87,462	11,294	42,581	33,587	27,973	77,826
1980	333,669	70,143	25,393	12,795	13,625	11,384	90,660	11,579	42,676	36,405	29,384	80,285
1981	339,968	74,373	25,780	13,063	14,004	13,141	90,908	11,347	41,983	37,578	29,052	79,647
1982	346,796	78,178	26,499	13,757	14,758	15,576	90,703	11,577	41,877	37,249	29,082	78,243
1983	358,063	86,411	27,727	14,267	14,872	18,295	91,130	11,515	41,507	38,108	29,048	76,313
1984	363,068	88,272	28,413	14,326	15,067	20,366	92,416	11,331	42,114	38,971	29,991	74,217
1985	372,022	91,384	29,315	14,252	15,268	23,823	93,289	10,689	42,665	39,935	30,560	74,131
1986	384,203	97,032	30,602	14,065	15,578	25,352	95,918	10,670	43,717	41,531	30,759	74,797
	MASTER'S-GRANTING INSTITUTIONS:											
1975	43,772	3,781	1,781	1,328	2,527	1,463	9,623	506	5,637	3,480	9,278	13,991
1976	45,960	3,860	1,805	1,297	2,341	1,660	10,695	553	5,970	4,172	9,379	14,923
1977	51,754	4,719	2,039	1,357	2,175	1,876	12,128	573	6,399	5,156	10,570	16,890
1978 2/	52,125	4,911	1,903	1,317	2,024	2,032	12,228	666	6,156	5,406	11,174	16,536
1979	52,618	5,110	1,776	1,279	1,883	2,202	12,365	775	5,922	5,668	11,813	16,190
1980	49,431	4,941	1,559	1,413	1,735	2,194	11,844	675	5,214	5,955	11,252	14,493
1981	51,672	6,106	1,602	1,359	1,911	3,296	12,216	753	4,996	6,467	11,639	13,543
1982	52,186	6,416	1,700	1,417	2,441	4,236	12,186	737	4,433	7,016	11,016	12,774
1983	55,292	6,744	1,748	1,342	2,571	5,321	12,572	775	4,521	7,276	12,056	12,938
1984 3/	63,331	8,548	2,074	1,477	2,764	4,998	13,132	734	4,894	7,504	14,314	16,025
1985 3/	62,600	8,557	1,879	1,489	2,838	5,699	13,364	786	4,911	7,667	13,500	15,274
1986 3/	61,899	8,262	2,108	1,277	2,701	5,374	12,410	655	4,975	6,779	13,144	16,623

1/ INCLUDES ESTIMATED DATA FOR MASTER'S-GRANTING INSTITUTIONS, WHICH WERE NOT INCLUDED IN THE 1978 SURVEY.

2/ ESTIMATES FOR MASTER'S-GRANTING INSTITUTIONS FOR 1978 WERE BASED ON THE DATA FOR 1977 AND 1979.

3/ MASTER'S-GRANTING INSTITUTIONS WERE SURVEYED ON A SAMPLE BASIS; DATA SHOWN HERE ARE THEREFORE SUBJECT TO SAMPLING ERROR.

SOURCE: NATIONAL SCIENCE FOUNDATION, SRS.

TABLE 16. -- MALE SCIENCE/ENGINEERING GRADUATE STUDENTS IN ALL INSTITUTIONS BY FIELD: 1980-86

FIELD	NUMBER							AVERAGE ANNUAL PERCENT CHANGE		
	1980	1981	1982	1983	1984 1/	1985 1/	1986 1/	1980-85	1985-86	1980-86
TOTAL, ALL FIELDS	249,328	249,471	252,179	259,961	265,711	270,958	277,337	1.7	2.4	1.8
ENGINEERING	68,581	72,548	75,621	82,793	85,669	87,961	92,060	5.1	4.7	5.0
AEROSPACE	1,663	1,816	1,831	2,283	2,298	2,475	2,706	8.3	9.3	8.5
AGRICULTURAL	711	758	818	896	872	863	989	4.0	14.6	5.7
BIOMEDICAL	845	877	897	974	1,073	1,082	1,201	5.1	11.0	6.0
CHEMICAL	5,336	5,718	6,288	6,547	6,462	6,140	5,931	2.8	-3.4	1.8
CIVIL	11,973	12,778	12,614	13,388	13,551	13,046	13,176	1.7	1.0	1.6
ELECTRICAL	18,244	18,917	20,466	23,157	24,624	26,132	27,324	7.5	4.6	7.0
ENGINEERING SCIENCE	1,645	1,764	1,864	1,990	1,890	1,882	2,089	2.7	11.0	4.1
INDUSTRIAL	8,520	8,466	8,216	8,769	9,001	10,115	10,774	3.5	6.5	4.0
MECHANICAL	9,354	9,987	10,748	12,106	12,963	13,095	14,385	7.0	9.8	7.4
METALLURGICAL/MATERIALS	2,607	2,735	2,704	2,999	3,194	3,338	3,525	5.1	5.6	5.2
MINING	385	423	409	477	458	459	476	3.6	3.7	3.6
NUCLEAR	1,160	1,199	1,215	1,119	1,146	1,113	1,142	-.8	2.6	-.3
PETROLEUM	462	469	544	665	684	716	699	9.2	-2.4	7.1
ENGINEERING, N.E.C.	5,676	6,641	7,007	7,423	7,454	7,505	7,644	5.7	1.8	5.1
SCIENCES, TOTAL	180,747	176,923	176,558	177,168	180,042	182,997	185,277	.2	1.2	.4
PHYSICAL SCIENCES	22,352	22,366	22,776	23,594	24,201	24,636	25,712	2.0	4.4	2.4
ASTRONOMY	546	506	531	526	541	563	568	.6	.9	.7
CHEMISTRY	12,718	12,544	12,855	13,297	13,263	13,652	13,873	1.4	1.6	1.5
PHYSICS	8,950	9,133	9,238	9,609	10,172	10,166	10,994	2.6	8.1	3.5
PHYSICAL SCIENCES, N.E.C.	138	183	152	162	226	255	278	13.1	9.0	12.4
ENVIRONMENTAL SCIENCES	10,940	10,945	11,393	11,634	11,849	11,724	11,328	1.4	-3.4	-.6
ATMOSPHERIC SCIENCES	779	758	764	766	769	807	782	.7	-3.1	.1
GEOSCIENCES	6,743	6,746	7,318	7,808	7,895	7,899	7,575	3.2	-4.1	2.0
OCEANOGRAPHY	1,505	1,529	1,514	1,497	1,563	1,477	1,431	-.4	-3.1	-.8
ENVIRONMENTAL SCIENCES, N.E.C.	1,913	1,912	1,797	1,563	1,622	1,541	1,540	-4.2	-.1	-3.6
MATHEMATICAL SCIENCES	11,272	11,419	12,109	12,222	12,562	12,574	12,795	2.2	1.8	2.1
COMPUTER SCIENCES	10,491	12,228	14,366	16,968	18,659	22,326	23,266	16.3	4.2	14.2
LIFE SCIENCES	51,062	49,353	47,646	46,754	46,759	46,734	47,043	-1.8	.7	-1.4
AGRICULTURAL SCIENCES	9,447	9,370	9,314	9,183	8,937	8,522	8,377	-2.0	-1.7	-2.0
BIOLOGICAL SCIENCES	29,492	28,210	27,021	26,553	26,875	26,923	27,167	-1.8	.9	-1.4
ANATOMY	673	683	669	632	605	569	560	-3.3	-1.6	-3.0
BIOCHEMISTRY	2,732	2,694	2,630	2,658	2,804	2,936	3,004	1.5	2.3	1.6
BIOLOGY	9,347	8,651	7,873	7,670	7,828	7,736	7,646	-3.7	-1.2	-3.3
BIOMETRY/EPIDEMIOLOGY	648	656	561	547	472	640	677	-.2	5.8	.7
BIOPHYSICS	380	338	330	338	326	331	410	-2.7	23.9	1.3
BOTANY	2,429	2,285	2,329	2,201	2,168	2,089	2,134	-3.0	2.2	-2.1
CELL BIOLOGY	619	651	726	774	789	911	1,044	8.0	14.6	9.1
ECOLOGY	813	730	684	666	746	662	616	-4.0	-6.9	-4.5
ENTOMOLOGY/PARASITOLOGY	1,368	1,308	1,158	1,090	1,066	993	948	-6.2	-4.5	-5.9
GENETICS	495	470	461	512	545	595	663	3.7	11.4	5.0
MICROBIOLOGY	2,443	2,309	2,318	2,385	2,421	2,502	2,494	.5	-.3	.3
NUTRITION	1,428	1,386	1,368	1,326	1,317	1,355	1,309	-1.0	-3.4	-1.4
PATHOLOGY	922	882	872	883	872	787	825	-3.1	4.8	-1.8
PHARMACOLOGY	1,361	1,330	1,356	1,328	1,277	1,300	1,269	-.9	-2.4	-1.2
PHYSIOLOGY	1,467	1,452	1,367	1,297	1,388	1,379	1,397	-1.2	1.3	-.8
ZOOLOGY	1,764	1,718	1,651	1,609	1,483	1,373	1,310	-4.9	-4.6	-4.8
BIOSCIENCES, N.E.C.	603	667	668	637	769	766	861	4.9	12.4	6.1
HEALTH SCIENCES	12,123	11,773	11,311	11,018	10,948	11,289	11,499	-1.4	1.9	-.9
DENTISTRY	801	716	676	607	664	648	724	-4.2	11.7	-1.7
NEUROLOGY	175	131	140	189	208	208	237	3.5	13.9	5.2
NURSING	649	730	717	747	754	766	783	3.4	2.2	3.2
PHARMACEUTICAL SCIENCES	1,730	1,797	1,751	1,776	1,635	1,653	1,710	-.9	3.4	-.2
PREVENTIVE MEDICINE/ COMMUNITY HEALTH	3,415	3,385	2,986	2,578	2,562	2,723	2,817	-4.4	3.5	-3.2
SPEECH PATHOLOGY/AUDIOLOGY	1,314	1,186	1,220	1,186	1,165	1,180	998	-2.1	-15.5	-4.5
VETERINARY SCIENCES	332	304	297	289	346	401	394	3.8	-1.7	2.9
CLINICAL MEDICINE, N.E.C.	823	865	954	844	767	791	915	-.8	15.6	1.8
HEALTH RELATED, N.E.C.	2,884	2,659	2,570	2,802	2,847	2,918	2,921	.2	.1	.2
PSYCHOLOGY	19,036	17,902	16,980	16,706	17,170	16,609	16,088	-2.7	-3.1	-2.8
SOCIAL SCIENCES	55,594	52,710	51,288	49,290	48,842	48,396	49,045	-2.7	1.3	-2.1
AGRICULTURAL ECONOMICS	1,874	1,791	1,804	1,807	1,786	1,751	1,732	-1.3	-1.1	-1.3
ANTHROPOLOGY	3,009	2,791	2,677	2,438	2,450	2,511	2,488	-3.6	-.9	-3.1
ECONOMICS (EXCEPT AGRICULTURAL)	10,126	10,139	10,237	10,159	9,791	9,682	9,512	-.9	-1.8	-1.0
GEOGRAPHY	2,267	2,198	2,195	2,051	2,079	1,994	2,055	-2.5	3.1	-1.6
HISTORY AND PHILOSOPHY OF SCIENCE	189	159	167	161	187	205	189	1.6	-7.8	.0
LINGUISTICS	1,325	1,349	1,180	1,217	1,244	1,175	1,237	-2.4	5.3	-1.1
POLITICAL SCIENCE	20,340	19,295	18,631	17,431	16,816	17,329	17,004	-3.2	-1.9	-2.9
SOCIOLOGY	3,984	3,780	3,376	3,269	3,190	3,111	2,977	-4.8	-4.3	-4.7
SOCIOLOGY/ANTHROPOLOGY	648	544	553	586	504	476	461	-6.0	-3.2	-5.5
SOCIAL SCIENCES, N.E.C.	11,832	10,704	10,468	10,171	10,795	10,162	11,390	-3.0	12.1	-.6

1/ INCLUDES ESTIMATED DATA FOR MASTER'S-GRANTING INSTITUTIONS, WHICH WERE SURVEYED ON A SAMPLE BASIS BEGINNING IN 1984.

SOURCE: NATIONAL SCIENCE FOUNDATION, SRS.

TABLE 17. -- FEMALE SCIENCE/ENGINEERING GRADUATE STUDENTS IN ALL INSTITUTIONS BY FIELD: 1980-86

FIELD	NUMBER							AVERAGE ANNUAL PERCENT CHANGE		
	1980	1981	1982	1983	1984 1/	1985 1/	1986 1/	1980-85	1985-86	1980-86
TOTAL, ALL FIELDS	133,772	142,169	146,803	153,394	160,688	163,664	168,765	4.1	3.1	3.9
ENGINEERING	6,503	7,931	8,973	10,362	11,151	11,980	13,234	13.0	10.5	12.6
AEROSPACE	74	67	110	125	133	167	201	17.7	20.4	18.1
AGRICULTURAL	31	44	57	73	82	78	85	20.3	9.0	18.3
BIOMEDICAL	166	180	219	270	294	291	346	11.9	18.9	13.0
CHEMICAL	679	778	901	1,016	983	1,016	1,032	8.4	1.6	7.2
CIVIL	1,529	1,737	1,909	2,018	2,189	2,305	2,332	8.6	1.2	7.3
ELECTRICAL	983	1,276	1,551	2,056	2,222	2,408	2,899	19.6	20.4	19.8
ENGINEERING SCIENCE	151	201	266	291	301	245	302	10.2	23.3	12.2
INDUSTRIAL	1,350	1,560	1,654	1,943	2,174	2,417	2,699	12.4	11.7	12.2
MECHANICAL	534	631	719	805	961	1,016	1,155	13.7	13.7	13.7
METALLURGICAL/MATERIALS	303	390	420	448	470	601	667	14.7	11.0	14.1
MINING	28	39	40	47	44	30	36	1.4	20.0	4.3
NUCLEAR	81	84	86	84	88	107	123	5.7	15.0	7.2
PETROLEUM	41	52	42	72	60	66	48	10.0	-27.3	2.7
ENGINEERING, N.E.C.	553	892	999	1,114	1,151	1,234	1,309	17.4	6.1	15.4
SCIENCES, TOTAL	127,269	134,238	137,830	143,032	149,537	151,684	155,531	3.6	2.5	3.4
PHYSICAL SCIENCES	4,600	5,016	5,423	5,881	6,285	6,559	6,998	7.4	6.7	7.2
ASTRONOMY	82	91	101	92	98	108	121	5.7	12.0	6.7
CHEMISTRY	3,504	3,803	4,160	4,513	4,710	4,835	5,143	6.7	6.4	6.6
PHYSICS	948	1,017	1,068	1,202	1,345	1,494	1,585	9.5	6.1	8.9
PHYSICAL SCIENCES, N.E.C.	66	105	94	74	132	122	149	13.1	22.3	14.5
ENVIRONMENTAL SCIENCES	3,268	3,477	3,781	3,975	3,954	4,017	4,014	4.2	-.1	3.5
ATMOSPHERIC SCIENCES	110	124	125	130	138	157	179	7.4	14.0	8.5
GEOSCIENCES	1,925	2,062	2,303	2,513	2,471	2,484	2,373	5.2	-4.5	3.5
OCEANOGRAPHY	487	553	577	566	628	613	651	4.7	6.2	5.0
ENVIRONMENTAL SCIENCES, N.E.C.	746	738	776	766	717	763	811	.5	6.3	1.4
MATHEMATICAL SCIENCES	4,088	4,496	5,090	5,221	5,269	5,532	5,584	6.2	.9	5.3
COMPUTER SCIENCES	3,087	4,209	5,446	6,648	6,705	7,196	7,460	18.4	3.7	15.8
LIFE SCIENCES	51,442	53,771	55,243	56,948	58,788	59,919	61,285	3.1	2.3	3.0
AGRICULTURAL SCIENCES	2,807	2,730	3,000	3,107	3,128	2,953	2,948	1.0	-.2	.8
BIOLOGICAL SCIENCES	18,398	18,769	19,289	19,475	20,133	20,653	21,526	2.3	4.2	2.7
ANATOMY	409	389	405	405	424	424	413	.7	-2.6	.2
BIOCHEMISTRY	1,321	1,367	1,494	1,576	1,661	1,731	1,871	5.6	8.1	6.0
BIOLOGY	5,645	5,552	5,524	5,618	5,955	5,961	6,152	1.1	3.2	1.4
BIOMETRY/EPIDEMIOLOGY	611	526	605	609	532	720	792	3.3	10.0	4.4
BIOPHYSICS	105	125	110	112	107	110	137	.9	24.5	4.5
BOTANY	1,188	1,213	1,315	1,249	1,237	1,244	1,179	.9	-5.2	-.1
CELL BIOLOGY	346	367	417	408	467	518	672	8.4	29.7	11.7
ECOLOGY	368	371	367	341	355	375	388	.4	3.6	.9
ENTOMOLOGY/PARASITOLOGY	354	356	382	385	372	349	358	-.3	2.6	.2
GENETICS	469	467	529	523	467	480	556	.5	15.8	2.9
MICROBIOLOGY	1,735	1,761	1,812	1,877	1,934	1,978	1,993	2.7	.8	2.3
NUTRITION	2,697	2,969	2,991	3,032	3,022	3,130	3,130	3.0	•	2.5
PATHOLOGY	507	562	588	579	596	568	573	2.3	.9	2.1
PHARMACOLOGY	654	694	728	741	773	807	811	4.3	.5	3.7
PHYSIOLOGY	637	692	691	697	772	832	864	5.5	3.8	5.2
ZOOLOGY	922	907	852	821	823	763	769	-3.7	.8	-3.0
BIOSCIENCES, N.E.C.	430	451	479	502	638	664	868	9.1	30.8	12.4
HEALTH SCIENCES	30,237	32,272	32,954	34,366	35,527	36,314	36,811	3.7	1.4	3.3
DENTISTRY	201	226	160	169	186	187	206	-1.4	10.2	.4
NEUROLOGY	74	60	64	72	109	129	146	11.8	13.2	12.0
NURSING	13,228	14,973	15,537	16,198	17,657	17,601	17,338	5.9	-1.5	4.6
PHARMACEUTICAL SCIENCES	704	752	768	865	884	900	967	5.0	7.4	5.4
PREVENTIVE MEDICINE/ COMMUNITY HEALTH	3,688	3,841	3,830	3,610	3,765	4,025	3,926	1.8	-2.5	1.0
SPEECH PATHOLOGY/AUDIOLOGY	7,301	7,410	7,463	7,646	6,718	6,973	6,997	-.9	.3	-.7
VETERINARY SCIENCES	179	177	174	177	211	236	236	5.7	.0	4.7
CLINICAL MEDICINE, N.E.C.	794	745	793	800	726	852	951	1.4	11.6	3.1
HEALTH RELATED, N.E.C.	4,068	4,088	4,165	4,829	5,271	5,410	6,044	5.9	11.7	6.8
PSYCHOLOGY	21,600	22,789	23,118	24,398	27,135	27,452	27,815	4.9	1.3	4.3
SOCIAL SCIENCES	39,184	40,480	39,729	39,961	41,400	41,009	42,375	.9	3.3	1.3
AGRICULTURAL ECONOMICS	469	471	463	488	484	503	496	1.4	-1.4	.9
ANTHROPOLOGY	3,313	3,327	3,271	3,206	3,155	3,106	3,395	-1.3	8.0	.2
ECONOMICS (EXCEPT AGRICULTURAL)	3,006	3,205	3,498	3,428	3,274	3,317	3,318	2.0	•	1.7
GEOGRAPHY	937	989	971	1,009	1,027	994	1,032	1.2	3.9	1.6
HISTORY AND PHILOSOPHY OF SCIENCE	91	89	89	92	87	109	110	3.7	.9	3.2
LINGUISTICS	1,682	1,790	1,623	1,805	1,829	1,762	1,774	.9	.7	.9
POLITICAL SCIENCE	10,872	11,536	11,276	10,872	10,625	11,467	11,625	1.1	1.4	1.1
SOCIOLOGY	4,017	4,036	3,870	3,680	3,671	3,481	3,558	-2.8	2.2	-2.0
SOCIOLOGY/ANTHROPOLOGY	558	566	580	614	586	587	601	1.0	2.4	1.2
SOCIAL SCIENCES, N.E.C.	14,239	14,471	14,088	14,767	16,663	15,682	16,506	1.9	5.3	2.5

1/ INCLUDES ESTIMATED DATA FOR MASTER'S-GRANTING INSTITUTIONS, WHICH WERE SURVEYED ON A SAMPLE BASIS BEGINNING IN 1984.

• LESS THAN 0.05-PERCENT CHANGE

SOURCE: NATIONAL SCIENCE FOUNDATION, SRS.

TABLE 18. -- SCIENCE/ENGINEERING GRADUATE STUDENTS IN ALL INSTITUTIONS BY FIELD, CITIZENSHIP, AND RACIAL/ETHNIC BACKGROUND: 1980-86

FIELD, CITIZENSHIP, AND RACIAL/ETHNIC BACKGROUND	NUMBER							AVERAGE ANNUAL PERCENT CHANGE		
	1980 1/	1981 1/	1982	1983	1984 2/	1985 2/	1986 2/	1980-85	1985-86	1980-86
TOTAL, ALL FIELDS:	383,100	391,640	398,982	413,355	426,399	434,622	446,102	2.6	2.6	2.6
TOTAL US CITIZENS	-	-	330,564	338,994	349,474	353,325	357,679	**	1.2	**
BLACK, NON-HISPANIC	11,627	11,144	13,325	14,468	14,870	14,567	14,394	4.6	-1.2	3.6
AMERICAN INDIAN/ALASKAN NATIVE	915	747	1,176	1,219	1,164	1,031	1,055	2.4	2.3	2.4
ASIAN/PACIFIC ISLANDER	8,224	7,787	9,335	10,657	12,327	14,165	15,184	11.5	7.2	10.8
HISPANIC	7,412	7,282	9,326	11,169	12,062	11,415	11,552	9.0	1.2	7.7
WHITE, NON-HISPANIC	228,655	219,415	261,581	276,835	278,216	277,787	282,154	4.0	1.6	3.6
OTHER OR UNKNOWN	-	-	35,821	24,646	30,835	34,361	33,339	**	-3.0	**
FOREIGN	-	-	68,418	74,361	76,926	81,297	88,423	**	8.8	**
ENGINEERING:	75,084	80,479	84,594	93,155	96,820	99,941	105,294	5.9	5.4	5.8
TOTAL US CITIZENS	-	-	59,385	65,320	68,295	70,611	72,845	**	3.2	**
BLACK, NON-HISPANIC	930	880	1,144	1,419	1,544	1,508	1,560	10.1	3.4	9.0
AMERICAN INDIAN/ALASKAN NATIVE	75	109	171	185	207	130	138	11.6	6.7	10.7
ASIAN/PACIFIC ISLANDER	2,710	2,234	2,747	3,462	4,217	5,139	5,439	13.7	5.8	12.3
HISPANIC	1,084	941	1,101	1,495	1,657	1,595	1,684	8.0	5.6	7.6
WHITE, NON-HISPANIC	36,974	37,269	43,376	49,982	51,535	52,425	54,578	7.2	4.1	6.7
OTHER OR UNKNOWN	-	-	10,846	8,777	9,135	9,815	9,446	**	-3.8	**
FOREIGN	-	-	25,209	27,835	28,525	29,330	32,449	**	10.6	**
SCIENCES, TOTAL:	308,016	311,161	314,388	320,200	329,579	334,681	340,808	1.7	1.8	1.7
TOTAL US CITIZENS	-	-	271,179	273,674	281,178	282,714	284,834	**	.7	**
BLACK, NON-HISPANIC	10,697	10,264	12,181	13,049	13,326	13,059	12,234	4.1	-1.7	3.1
AMERICAN INDIAN/ALASKAN NATIVE	840	638	1,005	1,034	957	902	917	1.4	1.7	1.5
ASIAN/PACIFIC ISLANDER	5,514	5,553	6,588	7,195	8,110	9,026	9,745	10.4	8.0	10.0
HISPANIC	6,328	6,341	8,225	9,674	10,405	9,820	9,868	9.2	.5	7.7
WHITE, NON-HISPANIC	191,681	182,146	218,205	226,853	226,681	225,362	227,576	3.3	1.0	2.9
OTHER OR UNKNOWN	-	-	24,975	15,869	21,700	24,546	23,893	**	-2.7	**
FOREIGN	-	-	43,209	46,526	48,401	51,967	55,974	**	7.7	**
PHYSICAL SCIENCES:	26,952	27,382	28,199	29,475	30,487	31,194	32,710	3.0	4.9	3.3
TOTAL US CITIZENS	-	-	21,254	21,813	22,421	22,256	22,812	**	2.5	**
BLACK, NON-HISPANIC	419	435	553	575	613	547	565	5.5	3.2	5.1
AMERICAN INDIAN/ALASKAN NATIVE	14	19	30	45	86	37	52	21.5	41.5	24.4
ASIAN/PACIFIC ISLANDER	626	623	697	749	943	972	1,064	9.2	9.5	9.2
HISPANIC	370	373	496	563	541	604	653	10.3	8.2	9.9
WHITE, NON-HISPANIC	16,323	15,856	17,689	18,663	18,838	18,479	18,800	2.5	1.7	2.4
OTHER OR UNKNOWN	-	-	1,769	1,218	1,399	1,617	1,678	**	3.8	**
FOREIGN	-	-	6,945	7,662	8,066	8,939	9,898	**	10.7	**
ENVIRONMENTAL SCIENCES:	14,208	14,422	15,174	15,609	15,803	15,741	15,342	2.1	-2.5	1.3
TOTAL US CITIZENS	-	-	13,290	13,734	13,994	13,832	13,320	**	-3.7	**
BLACK, NON-HISPANIC	104	102	103	112	112	127	102	4.1	-20.0	-.3
AMERICAN INDIAN/ALASKAN NATIVE	38	15	22	27	23	22	21	-10.4	-4.5	-9.4
ASIAN/PACIFIC ISLANDER	170	126	208	243	193	194	177	2.7	-8.7	.7
HISPANIC	149	154	191	227	272	272	271	12.8	-.7	10.5
WHITE, NON-HISPANIC	9,753	9,183	11,393	12,371	12,142	11,903	11,663	4.1	-2.0	3.0
OTHER OR UNKNOWN	-	-	1,373	754	1,252	1,314	1,088	**	-17.2	**
FOREIGN	-	-	1,884	1,875	1,808	1,909	2,022	**	5.9	**
MATHEMATICAL SCIENCES:	15,360	15,915	17,199	17,443	17,831	18,106	18,379	3.3	1.5	3.0
TOTAL US CITIZENS	-	-	12,668	12,482	12,548	12,676	12,471	**	-1.6	**
BLACK, NON-HISPANIC	300	304	357	404	400	423	448	7.1	5.8	6.9
AMERICAN INDIAN/ALASKAN NATIVE	38	7	42	33	31	27	44	-6.6	61.0	2.5
ASIAN/PACIFIC ISLANDER	324	385	492	564	634	692	727	16.4	5.1	14.4
HISPANIC	190	230	290	332	298	267	304	7.0	13.9	8.1
WHITE, NON-HISPANIC	8,076	8,054	10,158	10,331	10,016	9,871	9,476	4.1	-4.0	2.7
OTHER OR UNKNOWN	-	-	1,329	818	1,168	1,396	1,473	**	5.5	**
FOREIGN	-	-	4,531	4,961	5,283	5,430	5,907	**	8.8	**
COMPUTER SCIENCES:	13,578	16,437	19,812	23,616	25,364	29,522	30,726	16.8	4.1	14.6
TOTAL US CITIZENS	-	-	15,439	18,068	19,135	22,147	22,872	**	3.3	**
BLACK, NON-HISPANIC	193	262	528	564	528	578	658	24.5	14.0	22.7
AMERICAN INDIAN/ALASKAN NATIVE	11	5	31	22	48	56	20	38.5	-63.8	10.5
ASIAN/PACIFIC ISLANDER	569	638	890	1,099	1,150	1,800	2,039	25.9	13.3	23.7
HISPANIC	100	135	249	282	260	411	426	32.7	3.7	27.3
WHITE, NON-HISPANIC	6,551	7,254	11,574	13,482	13,638	15,061	15,790	18.1	4.8	15.8
OTHER OR UNKNOWN	-	-	2,167	2,619	3,513	4,242	3,939	**	-7.1	**
FOREIGN	-	-	4,373	5,548	6,229	7,375	7,853	**	6.5	**

See footnotes at end of table.

TABLE 18. -- SCIENCE/ENGINEERING GRADUATE STUDENTS IN ALL INSTITUTIONS BY FIELD, CITIZENSHIP, AND RACIAL/ETHNIC BACKGROUND: 1980-86
-Continued

FIELD, CITIZENSHIP, AND RACIAL/ETHNIC BACKGROUND	NUMBER							AVERAGE ANNUAL PERCENT CHANGE		
	1980 1/	1981 1/	1982	1983	1984 2/	1985 2/	1986 2/	1980-85	1985-86	1980-86
LIFE SCIENCES, TOTAL:	102,504	103,124	102,889	103,702	105,548	106,653	108,328	.8	1.6	.9
TOTAL US CITIZENS	-	-	91,628	91,849	93,217	93,717	94,099	**	.4	**
BLACK, NON-HISPANIC	2,711	2,445	2,941	3,256	3,415	3,573	3,350	5.7	-6.2	3.6
AMERICAN INDIAN/ALASKAN NATIVE	240	173	287	344	277	262	301	1.8	14.9	3.8
ASIAN/PACIFIC ISLANDER	2,101	1,830	2,225	2,370	2,600	2,839	3,074	6.2	8.3	6.5
HISPANIC	1,972	1,404	1,941	2,587	2,626	3,040	2,912	9.0	-4.2	6.7
WHITE, NON-HISPANIC	71,192	67,501	78,224	79,958	80,324	78,784	79,420	2.0	.8	1.8
OTHER OR UNKNOWN	-	-	6,010	3,334	3,975	5,220	5,041	**	-3.4	**
FOREIGN	-	-	11,261	11,853	12,331	12,936	14,229	**	10.0	**
AGRICULTURAL SCIENCES:	12,254	12,100	12,314	12,290	12,065	11,475	11,325	-1.3	-1.3	-1.3
TOTAL US CITIZENS	-	-	9,714	9,598	9,408	8,869	8,584	**	-3.2	**
BLACK, NON-HISPANIC	108	126	145	133	137	158	132	7.9	-16.5	3.4
AMERICAN INDIAN/ALASKAN NATIVE	19	13	25	32	21	20	31	1.0	55.0	8.5
ASIAN/PACIFIC ISLANDER	145	122	138	133	162	174	147	3.7	-15.5	.2
HISPANIC	285	168	210	223	294	399	341	7.0	-14.5	3.0
WHITE, NON-HISPANIC	7,712	7,709	8,504	8,667	8,500	7,722	7,671	*	-.7	-.1
OTHER OR UNKNOWN	-	-	692	410	294	396	262	**	-33.8	**
FOREIGN	-	-	2,600	2,692	2,657	2,606	2,741	**	5.2	**
BIOLOGICAL SCIENCES:	47,890	46,979	46,310	46,028	47,008	47,576	48,692	-.1	2.3	.3
TOTAL US CITIZENS	-	-	40,692	39,950	40,456	40,501	40,721	**	.5	**
BLACK, NON-HISPANIC	982	919	1,128	1,162	1,153	1,251	1,140	5.0	-8.9	2.5
AMERICAN INDIAN/ALASKAN NATIVE	56	40	92	121	88	91	113	10.2	23.9	12.4
ASIAN/PACIFIC ISLANDER	1,115	962	1,131	1,275	1,386	1,597	1,772	7.4	11.0	8.0
HISPANIC	768	586	810	912	850	975	1,031	4.9	5.7	5.0
WHITE, NON-HISPANIC	33,680	31,364	34,843	34,984	35,368	34,676	34,828	.6	.4	.6
OTHER OR UNKNOWN	-	-	2,688	1,496	1,610	1,912	1,837	**	-3.9	**
FOREIGN	-	-	5,618	6,078	6,552	7,075	7,972	**	12.7	**
HEALTH SCIENCES:	42,360	44,045	44,265	45,384	46,475	47,602	48,310	2.4	1.5	2.2
TOTAL US CITIZENS	-	-	41,222	42,301	43,353	44,347	44,794	**	1.0	**
BLACK, NON-HISPANIC	1,621	1,400	1,668	1,961	2,124	2,164	2,079	5.9	-4.0	4.2
AMERICAN INDIAN/ALASKAN NATIVE	165	120	170	191	168	151	158	-1.8	4.2	-.7
ASIAN/PACIFIC ISLANDER	841	746	956	962	1,052	1,068	1,155	4.9	8.2	5.4
HISPANIC	919	650	921	1,452	1,482	1,666	1,540	12.6	-7.5	9.0
WHITE, NON-HISPANIC	29,800	28,428	34,877	36,307	36,456	36,386	36,921	4.1	1.5	3.6
OTHER OR UNKNOWN	-	-	2,630	1,428	2,071	2,912	2,942	**	1.0	**
FOREIGN	-	-	3,043	3,083	3,122	3,255	3,516	**	8.0	**
PSYCHOLOGY:	40,636	40,691	40,098	41,104	44,305	44,060	43,903	1.6	-.4	1.3
TOTAL US CITIZENS	-	-	38,704	39,672	42,842	42,461	42,339	**	-.3	**
BLACK, NON-HISPANIC	1,418	1,450	1,643	1,916	2,200	2,075	2,047	7.9	-1.3	6.3
AMERICAN INDIAN/ALASKAN NATIVE	233	93	139	135	133	158	149	-7.5	-5.3	-7.2
ASIAN/PACIFIC ISLANDER	372	406	441	532	699	683	750	12.9	9.8	12.4
HISPANIC	1,298	1,231	1,471	1,830	2,596	1,749	1,869	6.1	6.8	6.3
WHITE, NON-HISPANIC	24,736	23,497	30,321	32,702	33,229	34,064	34,087	6.6	.1	5.5
OTHER OR UNKNOWN	-	-	4,689	2,557	3,985	3,732	3,436	**	-7.9	**
FOREIGN	-	-	1,394	1,432	1,463	1,600	1,564	**	-2.2	**
SOCIAL SCIENCES:	94,778	93,190	91,017	89,251	90,242	89,405	91,420	-1.2	2.3	-.6
TOTAL US CITIZENS	-	-	78,196	76,056	77,021	75,626	76,919	**	1.7	**
BLACK, NON-HISPANIC	5,552	5,266	6,056	6,222	6,058	5,735	5,664	.7	-1.2	.3
AMERICAN INDIAN/ALASKAN NATIVE	266	326	434	428	358	340	329	5.0	-3.1	3.6
ASIAN/PACIFIC ISLANDER	1,352	1,545	1,635	1,638	1,890	1,848	1,915	6.4	3.6	6.0
HISPANIC	2,249	2,814	3,587	3,853	3,812	3,477	3,433	9.1	-1.3	7.3
WHITE, NON-HISPANIC	85,050	80,801	58,846	59,346	58,493	57,201	58,340	.8	2.0	1.0
OTHER OR UNKNOWN	-	-	7,638	4,569	6,410	7,025	7,239	**	3.0	**
FOREIGN	-	-	12,821	13,195	13,221	13,779	14,500	**	5.2	**

1/ FOR PART-TIME STUDENTS, DISTRIBUTION BY CITIZENSHIP WAS NOT REQUESTED PRIOR TO 1982.
2/ INCLUDES ESTIMATED DATA FOR MASTER'S-GRANTING INSTITUTIONS, WHICH WERE SURVEYED ON A SAMPLE BASIS BEGINNING IN 1984.

SOURCE: NATIONAL SCIENCE FOUNDATION, SRS.

TABLE 19. -- FULL-TIME SCIENCE/ENGINEERING GRADUATE STUDENTS IN ALL INSTITUTIONS BY TYPE AND SOURCE OF MAJOR SUPPORT: 1980-86

TYPE AND SOURCE OF MAJOR SUPPORT	NUMBER							AVERAGE ANNUAL PERCENT CHANGE		
	1980	1981	1982	1983	1984 1/	1985 1/	1986 1/	1980-85	1985-86	1980-86
TOTAL, ALL TYPES:										
TOTAL, ALL SOURCES	249,159	252,997	255,297	263,690	267,320	270,353	279,235	1.6	3.3	1.9
FEDERAL, TOTAL	54,518	52,130	48,483	48,617	48,786	50,000	52,748	-1.7	5.5	-.5
DEPT OF DEFENSE	5,286	5,696	5,964	7,047	7,143	7,301	7,884	6.7	8.0	6.9
DEPT OF HHS, TOTAL	19,955	18,387	16,391	15,290	15,615	16,443	17,017	-3.8	3.5	-2.6
NIH	11,769	11,441	11,019	10,977	11,290	11,451	12,310	-.5	7.5	.8
OTHER HHS	8,186	6,946	5,372	4,313	4,325	4,991	4,708	-9.4	-5.7	-8.8
NSF	9,352	9,182	9,294	9,537	9,872	10,215	10,839	1.8	6.1	2.5
ALL OTHER FEDERAL	19,925	18,865	16,834	16,743	16,156	16,041	17,008	-4.2	6.0	-2.6
INSTITUTIONAL SUPPORT	90,514	94,035	97,486	101,042	105,157	106,456	111,025	3.3	4.3	3.5
OTHER OUTSIDE SUPPORT, TOTAL	21,846	23,211	24,511	25,347	25,455	27,098	27,777	4.4	2.5	4.1
ALL OTHER U.S.	13,498	14,297	15,367	16,289	17,180	19,246	20,044	7.4	4.1	6.8
FOREIGN	8,348	8,914	9,144	9,058	8,275	7,853	7,733	-1.2	-1.5	-1.3
SELF-SUPPORT	82,281	83,621	84,817	88,684	87,922	86,800	87,685	1.1	1.0	1.1
FELLOWSHIPS:										
TOTAL, ALL SOURCES	21,299	20,767	21,557	22,251	22,683	23,254	23,989	1.8	3.2	2.0
FEDERAL, TOTAL	4,778	4,238	4,277	4,266	4,299	4,483	4,709	-1.3	5.0	-.2
DEPT OF DEFENSE	257	190	204	257	241	265	291	.6	9.8	2.1
DEPT OF HHS, TOTAL	1,309	1,027	909	833	857	891	877	-7.4	-1.6	-6.5
NIH	802	722	661	594	658	646	705	-4.2	9.1	-2.1
OTHER HHS	507	305	248	239	199	245	172	-13.5	-29.8	-16.5
NSF	1,332	1,275	1,308	1,308	1,349	1,409	1,524	1.1	8.2	2.3
ALL OTHER FEDERAL	1,880	1,746	1,856	1,868	1,852	1,918	2,017	.4	5.2	1.2
INSTITUTIONAL SUPPORT	9,869	9,564	9,816	10,440	10,963	11,587	12,170	3.3	5.0	3.6
OTHER OUTSIDE SUPPORT, TOTAL	6,652	6,965	7,464	7,545	7,421	7,183	7,111	1.5	-1.0	1.1
ALL OTHER U.S.	3,236	3,242	3,685	3,883	4,212	4,317	4,315	5.9	-.1	4.9
FOREIGN	3,416	3,723	3,779	3,662	3,209	2,866	2,796	-3.5	-2.4	-3.3
SELF-SUPPORT	0	0	0	0	0	0	0	0	0	0
TRAINEESHIPS:										
TOTAL, ALL SOURCES	18,759	17,925	15,496	14,195	14,289	14,603	14,410	-4.9	-1.3	-4.3
FEDERAL, TOTAL	14,343	13,035	10,696	9,453	9,400	9,491	9,103	-7.9	-4.1	-7.3
DEPT OF DEFENSE	73	80	34	84	76	53	88	-6.2	66.0	3.2
DEPT OF HHS, TOTAL	11,757	10,702	9,140	7,880	7,858	8,070	7,771	-7.2	-3.7	-6.7
NIH	5,118	4,896	4,787	4,557	4,464	4,299	4,165	-3.4	-3.1	-3.4
OTHER HHS	6,639	5,806	4,353	3,323	3,394	3,771	3,606	-10.7	-4.4	-9.7
NSF	246	144	90	61	55	56	27	-25.6	-51.8	-30.8
ALL OTHER FEDERAL	2,267	2,109	1,432	1,428	1,411	1,311	1,217	-10.4	-7.2	-9.8
INSTITUTIONAL SUPPORT	3,254	3,754	3,618	3,571	3,820	3,977	4,264	4.1	7.2	4.6
OTHER OUTSIDE SUPPORT, TOTAL	1,162	1,136	1,182	1,171	1,069	1,135	1,043	-.5	-8.1	-1.8
ALL OTHER U.S.	832	864	871	806	791	840	819	.2	-2.5	-.3
FOREIGN	330	272	311	365	278	295	224	-2.2	-24.2	-6.3
SELF-SUPPORT	0	0	0	0	0	0	0	0	0	0
RESEARCH ASSISTANTSHIPS:										
TOTAL, ALL SOURCES	51,954	53,144	53,027	55,612	58,408	61,427	66,496	3.4	8.3	4.2
FEDERAL, TOTAL	29,395	29,207	28,345	29,209	29,543	30,576	32,939	.8	7.7	1.9
DEPT OF DEFENSE	2,934	3,297	3,469	3,935	4,081	4,192	4,619	7.4	10.2	7.9
DEPT OF HHS, TOTAL	6,062	6,081	5,801	6,010	6,408	6,976	7,858	2.8	12.6	4.4
NIH	5,459	5,520	5,281	5,458	5,820	6,212	7,105	2.6	14.4	4.5
OTHER HHS	603	561	520	552	588	764	752	4.8	-1.5	3.7
NSF	7,630	7,602	7,753	8,073	8,292	8,582	9,083	2.4	5.8	2.9
ALL OTHER FEDERAL	12,769	12,227	11,322	11,191	10,763	10,826	11,380	-3.2	5.1	-1.9
INSTITUTIONAL SUPPORT	16,688	17,549	17,795	18,556	20,233	20,639	23,144	4.3	12.1	5.6
OTHER OUTSIDE SUPPORT, TOTAL	5,871	6,388	6,887	7,847	8,631	10,212	10,413	11.7	2.0	10.0
ALL OTHER U.S.	5,321	5,780	6,299	7,287	8,031	9,659	9,806	12.7	1.5	10.7
FOREIGN	550	608	588	560	600	553	607	.1	9.8	1.7
SELF-SUPPORT	0	0	0	0	0	0	0	0	0	0
TEACHING ASSISTANTSHIPS:										
TOTAL, ALL SOURCES	54,134	56,023	58,652	60,521	61,855	62,410	62,826	2.9	.7	2.5
FEDERAL, TOTAL	680	622	431	505	412	557	551	-3.9	-1.2	-3.4
DEPT OF DEFENSE	0	0	0	0	0	0	0	0	0	0
DEPT OF HHS, TOTAL	145	118	110	112	73	98	116	-7.5	18.4	-3.7
NIH	83	75	49	75	44	59	87	-6.6	47.5	.8
OTHER HHS	62	43	61	37	29	39	29	-8.9	-25.6	-11.9
NSF	37	61	27	25	28	43	76	3.1	76.7	12.7
ALL OTHER FEDERAL	498	443	294	368	311	416	359	-3.5	-13.9	-5.3
INSTITUTIONAL SUPPORT	53,114	54,992	57,732	59,624	61,001	61,332	61,622	2.9	.5	2.5
OTHER OUTSIDE SUPPORT, TOTAL	340	409	489	392	442	520	653	8.9	25.5	11.5
ALL OTHER U.S.	340	409	489	392	442	520	653	8.9	25.5	11.5
FOREIGN	0	0	0	0	0	0	0	0	0	0
SELF-SUPPORT	0	0	0	0	0	0	0	0	0	0
OTHER TYPES OF SUPPORT:										
TOTAL, ALL SOURCES	103,013	105,138	106,565	111,111	110,085	108,660	111,514	1.1	2.6	1.3
FEDERAL, TOTAL	5,322	5,028	4,734	5,184	5,131	4,893	5,447	-1.7	11.3	.4
DEPT OF DEFENSE	2,022	2,129	2,257	2,771	2,746	2,790	2,886	6.7	3.4	6.1
DEPT OF HHS, TOTAL	682	459	431	455	418	408	396	-9.8	-2.9	-8.7
NIH	307	228	241	293	304	236	248	-5.1	5.1	-3.5
OTHER HHS	375	231	190	162	114	172	148	-14.4	-14.0	-14.4
NSF	107	100	116	70	148	125	129	3.2	3.2	3.2
ALL OTHER FEDERAL	2,511	2,340	1,930	1,888	1,819	1,569	2,036	-9.0	29.7	-3.4
INSTITUTIONAL SUPPORT	7,589	8,176	8,525	8,851	9,140	8,921	9,825	3.3	10.1	4.4
OTHER OUTSIDE SUPPORT, TOTAL	7,821	8,313	8,489	8,392	7,892	8,047	8,558	.6	6.3	1.5
ALL OTHER U.S.	3,769	4,002	4,023	3,921	3,704	3,909	4,451	.7	13.9	2.8
FOREIGN	4,052	4,311	4,466	4,471	4,188	4,139	4,107	.4	-.8	.2
SELF-SUPPORT	82,281	83,621	84,817	88,684	87,922	86,800	87,685	1.1	1.0	1.1

1/ INCLUDES ESTIMATED DATA FOR MASTER'S-GRANTING INSTITUTIONS, WHICH WERE SURVEYED ON A SAMPLE BASIS BEGINNING IN 1984.

SOURCE: NATIONAL SCIENCE FOUNDATION, SRS.

TABLE 20. -- SCIENCE/ENGINEERING GRADUATE STUDENTS IN DOCTORATE-GRANTING INSTITUTIONS BY FIELD: 1980-86

FIELD	NUMBER							AVERAGE ANNUAL PERCENT CHANGE		
	1980	1981	1982	1983	1984	1985	1986	1980-85	1985-86	1980-86
TOTAL, ALL FIELDS	333,669	339,968	346,796	358,063	363,068	372,022	384,203	2.2	3.3	2.4
ENGINEERING	70,143	74,373	78,178	86,411	88,272	91,384	97,032	5.4	6.2	5.6
AEROSPACE	1,730	1,876	1,933	2,376	2,413	2,626	2,891	8.7	10.1	8.9
AGRICULTURAL	742	802	875	969	954	941	1,074	4.9	14.1	6.4
BIOMEDICAL	963	1,012	1,064	1,185	1,288	1,317	1,479	6.5	12.3	7.4
CHEMICAL	5,859	6,264	6,929	7,352	7,196	7,015	6,891	3.7	-1.8	2.7
CIVIL	12,574	13,301	13,531	14,506	14,843	14,488	14,567	2.9	.5	2.5
ELECTRICAL	18,140	18,900	20,582	23,545	24,599	26,375	27,925	7.8	5.9	7.5
ENGINEERING SCIENCE	1,633	1,753	1,840	1,981	1,900	1,838	2,128	2.4	15.8	4.5
INDUSTRIAL	9,196	9,188	9,008	9,804	10,006	11,205	12,201	4.0	8.9	4.8
MECHANICAL	9,155	9,913	10,767	12,089	12,966	13,132	14,530	7.5	10.6	8.0
METALLURGICAL/MATERIALS	2,839	3,047	3,030	3,338	3,572	3,818	4,039	6.1	5.8	6.1
MINING	406	444	424	498	477	463	487	2.7	5.2	3.1
NUCLEAR	1,241	1,283	1,301	1,203	1,234	1,220	1,265	-.3	3.7	.3
PETROLEUM	491	518	580	724	732	752	726	8.9	-3.5	6.7
ENGINEERING, N.E.C.	5,174	6,072	6,314	6,841	6,092	6,194	6,829	3.7	10.3	4.7
SCIENCES, TOTAL	263,526	265,595	268,618	271,652	274,796	280,638	287,171	1.3	2.3	1.4
PHYSICAL SCIENCES	25,393	25,780	26,499	27,727	28,413	29,315	30,602	2.9	4.4	3.2
ASTRONOMY	628	597	632	618	639	671	689	1.3	2.7	1.6
CHEMISTRY	15,105	15,244	15,778	16,525	16,599	17,152	17,602	2.6	2.6	2.6
PHYSICS	9,579	9,864	10,018	10,515	10,988	11,300	12,073	3.4	6.8	3.9
PHYSICAL SCIENCES, N.E.C.	81	75	71	69	187	192	238	18.8	24.0	19.7
ENVIRONMENTAL SCIENCES	12,795	13,063	13,757	14,267	14,326	14,252	14,065	2.2	-1.3	1.6
ATMOSPHERIC SCIENCES	870	873	877	884	895	951	956	1.8	.5	1.6
GEOSCIENCES	8,125	8,287	9,044	9,686	9,716	9,533	9,176	3.2	-3.7	2.0
OCEANOGRAPHY	1,847	1,933	1,934	1,907	1,929	1,984	2,027	1.4	2.2	1.6
ENVIRONMENTAL SCIENCES, N.E.C.	1,953	1,970	1,900	1,790	1,786	1,784	1,906	-1.8	6.8	-.4
MATHEMATICAL SCIENCES	13,625	14,004	14,758	14,872	15,067	15,268	15,678	2.3	2.7	2.4
COMPUTER SCIENCES	11,384	13,141	15,576	18,295	20,364	23,823	25,352	15.9	6.4	14.3
LIFE SCIENCES	90,660	90,908	90,703	91,130	92,416	93,289	95,918	.6	2.8	.9
AGRICULTURAL SCIENCES	11,579	11,347	11,577	11,515	11,331	10,689	10,670	-1.6	-.2	-1.4
BIOLOGICAL SCIENCES	42,676	41,983	41,877	41,507	42,114	42,665	43,717	*	2.5	.4
ANATOMY	1,082	1,072	1,074	1,037	1,029	993	973	-1.7	-2.0	-1.8
BIOCHEMISTRY	3,991	4,022	4,090	4,194	4,460	4,657	4,865	3.1	4.5	3.4
BIOLOGY	10,782	10,152	9,870	9,720	9,748	9,796	10,036	-1.9	2.4	-1.2
BIOMETRY/EPIDEMIOLOGY	1,259	1,182	1,164	1,156	1,004	1,360	1,449	1.6	8.0	2.6
BIOPHYSICS	485	463	440	450	433	441	547	-1.9	24.0	2.0
BOTANY	3,561	3,457	3,602	3,405	3,371	3,307	3,242	-1.5	-2.0	-1.6
CELL BIOLOGY	965	1,018	1,143	1,182	1,256	1,429	1,716	8.2	20.1	10.1
ECOLOGY	1,130	1,048	1,018	962	1,034	978	938	-2.8	-4.1	-3.1
ENTOMOLOGY/PARASITOLOGY	1,722	1,664	1,540	1,475	1,438	1,342	1,306	-4.9	-2.7	-4.5
GENETICS	912	887	940	986	1,012	1,075	1,219	3.3	13.4	5.0
MICROBIOLOGY	3,978	3,889	3,992	4,137	4,229	4,342	4,380	1.8	.9	1.6
NUTRITION	3,853	4,121	4,103	4,073	4,034	4,009	4,006	-.8	-.1	-.7
PATHOLOGY	1,390	1,404	1,413	1,419	1,424	1,308	1,333	-1.2	1.9	-.7
PHARMACOLOGY	2,005	2,013	2,073	2,063	2,045	2,105	2,078	1.0	-1.3	.6
PHYSIOLOGY	2,104	2,144	2,058	1,994	2,160	2,211	2,261	1.0	2.3	1.2
ZOOLOGY	2,650	2,584	2,471	2,390	2,266	2,103	2,065	-4.5	-1.8	-4.1
BIOSCIENCES, N.E.C.	807	863	884	864	1,171	1,209	1,283	8.4	6.1	8.0
HEALTH SCIENCES	36,405	37,578	37,249	38,108	38,971	39,935	41,531	1.9	4.0	2.2
DENTISTRY	1,002	942	836	776	850	835	930	-3.6	11.4	-1.2
NEUROLOGY	220	177	190	247	303	324	373	8.0	15.1	9.2
NURSING	12,750	14,071	14,297	14,924	15,913	15,741	16,184	4.3	2.8	4.1
PHARMACEUTICAL SCIENCES	2,408	2,523	2,496	2,612	2,487	2,517	2,652	.9	5.4	1.6
PREVENTIVE MEDICINE/ COMMUNITY HEALTH	7,013	7,130	6,676	6,001	6,121	6,524	6,525	-1.4	*	-1.2
SPEECH PATHOLOGY/AUDIOLOGY	6,748	6,545	6,756	6,771	6,041	6,237	6,270	-1.6	.5	-1.2
VETERINARY SCIENCES	496	458	446	440	531	610	607	4.2	-.5	3.4
CLINICAL MEDICINE, N.E.C.	1,200	1,216	1,321	1,301	1,309	1,503	1,526	4.6	1.5	4.1
HEALTH RELATED, N.E.C.	4,568	4,516	4,231	5,036	5,416	5,644	6,444	4.3	14.5	6.0
PSYCHOLOGY	29,384	29,052	29,082	29,048	29,991	30,560	30,759	.8	.7	.8
SOCIAL SCIENCES	80,285	79,647	78,243	76,313	74,217	74,131	74,797	-1.6	.9	-1.2
AGRICULTURAL ECONOMICS	2,301	2,235	2,223	2,237	2,208	2,191	2,171	-1.0	-.9	-1.0
ANTHROPOLOGY	5,923	5,805	5,688	5,399	5,371	5,398	5,589	-1.8	3.5	-1.0
ECONOMICS (EXCEPT AGRICULTURAL)	12,231	12,407	12,652	12,440	11,916	11,733	11,581	-.8	-1.3	-.9
GEOGRAPHY	2,723	2,736	2,705	2,627	2,604	2,542	2,596	-1.4	2.1	-.8
HISTORY AND PHILOSOPHY OF SCIENCE	280	248	256	253	274	314	299	2.3	-4.8	1.1
LINGUISTICS	2,872	3,010	2,674	2,813	2,920	2,804	2,829	-.5	.9	-.3
POLITICAL SCIENCE	24,447	24,001	23,779	22,409	20,352	21,445	21,886	-2.6	2.1	-1.8
SOCIOLOGY	7,216	7,037	6,653	6,389	6,161	6,006	5,902	-3.6	-1.7	-3.3
SOCIOLOGY/ANTHROPOLOGY	1,095	1,021	1,042	1,014	960	906	904	-3.7	-.2	-3.1
SOCIAL SCIENCES, N.E.C.	21,197	21,147	20,571	20,732	21,451	20,792	21,040	-.4	1.2	-.1

* LESS THAN 0.05-PERCENT CHANGE

SOURCE: NATIONAL SCIENCE FOUNDATION, SRS.

TABLE 21. — SCIENCE/ENGINEERING GRADUATE STUDENTS IN DOCTORATE-GRANTING INSTITUTIONS BY GEOGRAPHIC DISTRIBUTION: 1980-86

DIVISION AND STATE	NUMBER							AVERAGE ANNUAL PERCENT CHANGE		
	1980	1981	1982	1983	1984	1985	1986	1980-85	1985-86	1980-86
TOTAL, ALL INSTITUTIONS	333,669	339,968	346,796	358,063	363,068	372,022	384,203	2.2	3.3	2.4
NEW ENGLAND	25,633	26,215	26,810	28,128	28,309	28,915	29,737	2.4	2.8	2.5
CONNECTICUT	3,902	4,053	4,182	4,271	4,243	4,247	4,342	1.7	2.2	1.8
MAINE	467	395	416	509	580	523	538	2.3	2.9	2.4
MASSACHUSETTS	18,285	18,730	19,056	20,063	20,184	20,810	21,351	2.6	2.6	2.6
NEW HAMPSHIRE	752	733	782	800	807	834	883	2.1	5.9	2.7
RHODE ISLAND	1,700	1,739	1,739	1,851	1,834	1,883	1,993	2.1	5.8	2.7
VERMONT	527	565	635	634	661	618	630	3.2	1.9	3.0
MIDDLE ATLANTIC	61,005	64,822	65,222	67,368	69,055	69,378	71,654	2.6	3.3	2.7
NEW JERSEY	9,182	9,332	9,172	9,619	10,580	10,943	10,863	3.6	-.7	2.8
NEW YORK	36,071	38,564	39,108	40,185	40,859	40,599	42,114	2.4	3.7	2.6
PENNSYLVANIA	15,752	16,926	16,942	17,564	17,616	17,836	18,677	2.5	4.7	2.9
EAST NORTH CENTRAL	60,007	59,761	60,533	62,766	63,166	63,807	66,517	1.2	4.2	1.7
ILLINOIS	16,122	16,073	16,095	16,799	17,059	17,617	18,238	1.8	3.5	2.1
INDIANA	7,345	7,694	7,919	8,207	7,491	6,966	7,732	-1.1	11.0	.9
MICHIGAN	12,744	12,132	12,544	12,968	13,158	13,286	14,019	.8	5.5	1.6
OHIO	15,773	15,922	16,099	16,803	17,378	17,951	18,492	2.6	3.0	2.7
WISCONSIN	8,023	7,940	7,876	7,989	8,080	7,987	8,036	-.1	.6	*
WEST NORTH CENTRAL	23,723	23,552	24,093	24,670	24,713	25,239	25,854	1.2	2.4	1.4
IOWA	4,541	4,385	4,682	4,938	4,831	4,924	5,080	1.6	3.2	1.9
KANSAS	4,356	4,234	4,216	4,492	4,402	4,260	4,258	-.4	*	-.4
MINNESOTA	5,097	5,209	5,202	5,267	5,404	5,806	5,821	2.6	.3	2.2
MISSOURI	5,983	5,813	6,031	5,841	6,048	6,170	6,588	.6	6.8	1.6
NEBRASKA	2,138	2,326	2,284	2,397	2,346	2,322	2,319	1.7	-.1	1.4
NORTH DAKOTA	907	913	946	946	906	949	970	.9	2.2	1.1
SOUTH DAKOTA	701	672	732	789	776	808	818	2.9	1.2	2.6
SOUTH ATLANTIC	49,519	51,214	52,065	52,818	54,237	56,871	59,640	2.8	4.9	3.1
DELAWARE	1,084	1,135	1,173	1,180	1,112	1,150	1,189	1.2	3.4	1.6
DISTRICT OF COLUMBIA	8,830	9,641	8,649	8,245	8,669	8,930	9,531	.2	6.7	1.3
FLORIDA	9,623	10,333	10,916	11,319	11,661	12,748	12,614	5.8	-1.1	4.6
GEORGIA	5,672	5,766	5,913	5,892	6,437	6,199	6,584	1.8	6.2	2.5
MARYLAND	5,185	5,431	5,484	5,892	5,973	6,185	6,609	3.6	6.9	4.1
NORTH CAROLINA	6,725	6,664	7,116	7,363	7,449	7,477	7,938	2.1	6.2	2.8
SOUTH CAROLINA	2,760	2,826	2,944	3,017	3,150	3,240	3,558	3.3	9.8	4.3
VIRGINIA	6,931	7,011	7,153	7,273	7,903	9,087	9,752	5.6	7.3	5.9
WEST VIRGINIA	2,709	2,407	2,717	2,637	1,883	1,855	1,865	-7.3	.5	-4.0
EAST SOUTH CENTRAL	13,163	12,655	12,867	13,168	13,678	14,204	14,822	1.5	4.4	2.0
ALABAMA	3,350	3,276	3,296	3,366	3,706	4,081	4,411	4.0	8.1	4.7
KENTUCKY	2,571	2,709	2,827	2,865	2,906	2,872	2,908	2.2	1.3	2.1
MISSISSIPPI	1,893	1,841	1,983	2,063	2,264	2,238	2,322	3.4	3.8	3.5
TENNESSEE	5,349	4,829	4,791	4,874	4,802	5,013	5,181	-1.3	3.4	-.5
WEST SOUTH CENTRAL	28,026	28,205	30,249	32,724	33,360	33,360	33,994	3.5	1.9	3.3
ARKANSAS	1,060	1,164	1,224	1,189	1,211	1,197	1,160	2.5	-3.1	1.5
LOUISIANA	3,596	3,862	4,084	4,344	4,564	4,553	4,438	4.8	-2.5	3.6
OKLAHOMA	3,855	3,475	3,721	4,066	4,029	4,117	4,228	1.3	2.7	1.6
TEXAS	19,515	19,704	21,220	23,125	23,556	23,493	24,168	3.8	2.9	3.6
MOUNTAIN	21,102	21,428	22,841	23,064	23,015	24,028	24,921	2.6	3.7	2.8
ARIZONA	5,228	5,593	6,397	6,384	6,485	6,997	7,174	6.0	2.5	5.4
COLORADO	6,881	6,885	6,923	6,702	6,456	6,778	7,398	-.3	9.1	1.2
IDAHO	968	913	937	1,004	1,008	1,041	1,035	1.5	-.6	1.1
MONTANA	830	810	976	1,019	1,030	980	911	3.4	-7.0	1.6
NEVADA	450	464	413	532	561	547	536	4.0	-2.0	3.0
NEW MEXICO	2,203	2,296	2,372	2,551	2,464	2,551	2,647	3.0	3.8	3.1
UTAH	3,882	3,737	4,021	4,037	4,232	4,321	4,480	2.2	3.7	2.4
WYOMING	660	730	802	835	779	813	740	4.3	-9.0	1.9
PACIFIC	49,538	50,132	50,008	50,974	50,956	53,546	54,319	1.6	1.4	1.5
ALASKA	272	320	355	424	352	381	399	7.0	4.7	6.6
CALIFORNIA	37,918	38,974	39,181	40,009	39,636	42,089	42,714	2.1	1.5	2.0
HAWAII	2,004	2,012	2,053	1,965	1,936	1,879	1,967	-1.3	4.7	-.3
OREGON	3,216	3,141	3,175	3,305	3,456	3,523	3,705	1.8	5.2	2.4
WASHINGTON	6,128	5,685	5,244	5,271	5,576	5,674	5,534	-1.5	-2.5	-1.7
OUTLYING AREAS	1,953	1,984	2,108	2,383	2,579	2,674	2,745	6.5	2.7	5.8

* LESS THAN 0.05-PERCENT CHANGE

SOURCE: NATIONAL SCIENCE FOUNDATION, SRS.

TABLE 22. -- GRADUATE SCIENCE/ENGINEERING ENROLLMENT
IN DOCTORATE-GRANTING INSTITUTIONS,
RANKED BY TOTAL GRADUATE SCIENCE/ENGINEERING ENROLLMENT: 1981-86

INSTITUTIONAL RANKING	1981	1982	1983	1984	1985	1986
TOTAL, ALL INSTITUTIONS	339,951	346,796	358,063	363,068	372,022	384,203
1 UNIVERSITY OF SOUTHERN CALIFORNIA	7,507	7,651	8,343	7,341	8,373	8,213
2 UNIVERSITY OF MINNESOTA	5,209	5,202	5,249	5,372	5,760	5,775
3 UNIVERSITY OF CALIF AT BERKELEY	5,598	5,400	5,381	5,545	5,448	5,549
4 OHIO STATE UNIVERSITY	4,787	4,704	4,917	4,874	5,044	5,360
5 UNIVERSITY OF WISCONSIN - MADISON	5,405	5,346	5,247	5,411	5,229	5,229
6 UNIV OF TEXAS AT AUSTIN	4,032	4,286	4,745	4,744	4,931	4,980
7 UNIVERSITY OF ILLINOIS - URBANA	4,313	4,494	4,556	4,326	4,673	4,873
8 UNIVERSITY OF MICHIGAN	4,401	4,310	4,503	4,526	4,622	4,727
9 MASSACHUSETTS INSTITUTE OF TECHNOLOGY	3,950	3,886	4,466	4,472	4,552	4,567
10 GEORGE WASHINGTON UNIVERSITY	3,790	3,308	3,388	3,664	3,532	4,372
TOTAL, 1ST 10 INSTS.	48,992	48,587	50,795	50,275	52,164	53,645
11 RUTGERS THE STATE UNIVERSITY	4,247	4,078	4,387	4,212	4,265	4,359
12 UNIVERSITY OF PITTSBURGH	4,558	4,643	4,694	4,717	4,314	4,215
13 UNIVERSITY OF CALIF AT LOS ANGELES	4,266	4,084	4,198	4,107	4,214	4,201
14 UNIVERSITY OF WASHINGTON	4,231	3,870	3,904	4,165	4,234	4,148
15 PENNSYLVANIA STATE UNIVERSITY	3,573	3,503	3,557	3,628	3,781	4,129
16 STANFORD UNIVERSITY	3,844	4,026	4,297	4,134	4,135	4,049
17 TEXAS A & M UNIVERSITY	3,365	3,679	3,907	3,929	3,795	4,019
18 UNIVERSITY OF ARIZONA	3,169	3,159	3,295	3,449	3,601	3,833
19 PURDUE UNIVERSITY	3,917	4,192	4,322	3,586	3,654	3,764
20 CORNELL UNIVERSITY	3,048	3,011	3,113	3,240	3,316	3,673
TOTAL, 1ST 20 INSTS.	87,210	86,832	90,469	89,442	91,473	94,035
21 VIRGINIA POLYTECHNIC INST AND STATE UNI	2,350	2,373	2,555	2,838	3,527	3,559
22 UNIVERSITY OF MARYLAND - COLLEGE PARK	2,867	2,975	3,196	3,333	3,439	3,515
23 UNIVERSITY OF COLORADO	3,517	3,501	3,187	3,070	3,207	3,430
24 MICHIGAN STATE UNIVERSITY	3,050	3,079	3,201	3,125	3,070	3,315
25 UNIVERSITY OF FLORIDA	2,603	2,812	2,849	3,049	3,244	3,305
26 HARVARD UNIVERSITY	3,042	3,071	2,842	3,013	3,216	3,274
27 NEW YORK UNIVERSITY	3,372	3,711	3,853	3,322	3,680	3,220
28 COLUMBIA UNIVERSITY MAIN DIVISION	2,991	3,159	2,993	3,020	3,065	3,156
29 FLORIDA INSTITUTE OF TECHNOLOGY	2,715	2,720	2,904	3,049	3,255	3,139
30 SUNY - BUFFALO	2,089	2,260	2,338	3,041	2,988	3,097
TOTAL, 1ST 30 INSTS.	115,806	116,693	120,387	120,302	124,164	127,045
31 NORTH CAROLINA STATE UNIV AT RALEIGH	2,252	2,527	2,634	2,729	2,690	2,964
32 BOSTON UNIVERSITY	2,539	2,482	2,592	2,595	2,712	2,908
33 UNIVERSITY OF ILLINOIS AT CHICAGO	2,327	2,428	2,530	2,708	2,638	2,801
34 UNIVERSITY OF TENNESSEE AT KNOXVILLE	2,828	2,826	2,770	2,669	2,735	2,797
35 UNIV OF NORTH CAROLINA AT CHAPEL HILL	2,473	2,553	2,638	2,604	2,669	2,757
36 UNIVERSITY OF CALIF AT DAVIS	2,854	2,682	2,557	2,571	2,662	2,746
37 ARIZONA STATE UNIVERSITY	1,994	2,424	2,446	2,444	2,662	2,729
38 IOWA STATE UNIVERSITY OF SCI & TECH	2,432	2,581	2,637	2,528	2,578	2,619
39 UNIVERSITY OF MASSACHUSETTS AT AMHERST	2,006	2,170	2,317	2,407	2,506	2,617
40 NORTHEASTERN UNIVERSITY	3,426	3,399	3,539	2,825	2,699	2,615
TOTAL, 1ST 40 INSTS.	140,937	142,765	147,047	146,382	150,715	154,596
41 GEORGIA INSTITUTE OF TECHNOLOGY	1,998	2,019	2,000	2,339	2,271	2,554
42 UNIVERSITY OF CINCINNATI	2,420	2,422	2,468	2,519	2,483	2,517
43 INDIANA UNIVERSITY	2,376	2,271	2,362	2,411	1,869	2,513
44 UNIVERSITY OF PENNSYLVANIA	2,619	2,642	2,573	2,436	2,523	2,510
45 WAYNE STATE UNIVERSITY	1,831	2,124	2,149	2,255	2,333	2,491
46 UNIVERSITY OF OKLAHOMA	1,892	1,993	2,294	2,310	2,358	2,382
47 SUNY - STONY BROOK	2,413	2,261	2,297	2,261	2,270	2,380
48 UNIVERSITY OF CONNECTICUT	2,257	2,396	2,460	2,526	2,309	2,355
49 UNIVERSITY OF IOWA	1,877	2,031	2,226	2,204	2,245	2,354
50 SYRACUSE UNIVERSITY	2,082	2,172	2,388	2,454	2,279	2,351
TOTAL, 1ST 50 INSTS.	162,702	165,096	170,264	170,097	173,655	179,003

CONTINUED ON NEXT PAGE.

TABLE 22. -- GRADUATE SCIENCE/ENGINEERING ENROLLMENT IN DOCTORATE-GRANTING INSTITUTIONS, RANKED BY TOTAL GRADUATE SCIENCE/ENGINEERING ENROLLMENT: 1981-86
- CONTINUED

INSTITUTIONAL RANKING	1981	1982	1983	1984	1985	1986
51 POLYTECHNIC UNIVERSITY	2,304	1,345	1,540	1,743	1,929	2,324
52 SAN DIEGO STATE UNIVERSITY	1,812	2,068	1,905	1,903	2,224	2,280
53 UNIV OF TEXAS AT ARLINGTON	1,723	1,862	1,901	2,100	2,117	2,198
54 UNIVERSITY OF UTAH	1,917	1,942	2,052	2,111	2,180	2,185
55 NEW JERSEY INSTITUTE OF TECHNOLOGY	830	849	940	1,692	1,951	2,162
56 UNIVERSITY OF SOUTH CAROLINA	1,774	1,814	1,814	1,896	1,929	2,136
57 UNIVERSITY OF MISSOURI - COLUMBIA	1,954	2,060	1,949	2,066	1,987	2,067
58 UNIVERSITY OF KANSAS	2,212	2,255	2,387	2,215	2,124	2,049
59 TEXAS WOMAN'S UNIVERSITY	1,660	1,680	1,945	1,977	1,928	1,976
60 UNIVERSITY OF HAWAII AT MANOA	2,012	2,053	1,965	1,936	1,879	1,967
TOTAL, 1ST 60 INSTS.	180,900	183,024	188,662	189,736	193,903	200,347
61 CASE WESTERN RESERVE UNIVERSITY	1,676	1,736	1,779	1,848	1,921	1,947
62 UNIVERSITY OF LOWELL	1,124	1,278	1,408	1,738	1,805	1,932
63 CUNY GRADUATE SCHOOL AND UNIV CENTER	1,812	1,830	1,815	1,835	1,731	1,921
64 LOUISIANA STATE UNIVERSITY SYSTEM	1,638	1,823	1,852	2,045	2,060	1,908
65 UNIVERSITY OF KENTUCKY	1,648	1,757	1,716	1,819	1,872	1,899
66 UNIVERSITY OF HOUSTON-UNIVERSITY PARK	1,410	1,482	1,684	1,486	1,622	1,895
67 UNIVERSITY OF WISCONSIN - MILWAUKEE	1,843	1,789	1,936	1,885	1,894	1,884
68 YALE UNIVERSITY	1,685	1,686	1,707	1,612	1,824	1,870
69 UNIVERSITY OF VIRGINIA	1,479	1,529	1,539	1,631	1,763	1,848
70 RENSSELAER POLYTECHNIC INSTITUTE	1,643	1,695	1,825	1,822	1,761	1,841
TOTAL, 1ST 70 INSTS.	196,858	199,629	205,923	207,457	212,156	219,292
71 STEVENS INSTITUTE OF TECHNOLOGY	1,433	1,222	1,300	1,750	1,766	1,828
72 COLORADO STATE UNIVERSITY	1,803	1,831	1,813	1,757	1,768	1,809
73 OREGON STATE UNIVERSITY	1,652	1,622	1,657	1,732	1,673	1,797
74 LONG ISLAND UNIVERSITY	2,130	2,096	1,945	2,089	1,688	1,760
75 COLUMBIA UNIVERSITY TEACHERS COLLEGE	1,733	1,690	1,400	1,713	1,753	1,758
76 NORTHWESTERN UNIVERSITY	1,536	1,590	1,635	1,680	1,759	1,740
77 TEMPLE UNIVERSITY	1,280	1,212	1,478	1,469	1,449	1,693
78 UNIVERSITY OF GEORGIA	1,779	1,869	1,731	1,740	1,667	1,691
79 VIRGINIA COMMONWEALTH UNIVERSITY	1,355	1,370	1,318	1,346	1,434	1,671
80 SANTA CLARA UNIVERSITY	957	1,165	1,310	1,422	1,580	1,665
TOTAL, 1ST 80 INSTS.	212,516	215,296	221,510	224,155	228,693	236,704
81 ILLINOIS INSTITUTE OF TECHNOLOGY	1,758	1,737	1,784	1,745	1,781	1,636
82 WEST VIRGINIA UNIVERSITY	2,142	2,456	2,486	1,728	1,652	1,629
83 UNIVERSITY OF CHICAGO	1,427	1,420	1,444	1,450	1,503	1,625
84 FLORIDA STATE UNIVERSITY	1,516	1,650	1,598	1,573	1,559	1,604
85 AMERICAN UNIVERSITY	1,833	1,705	1,459	1,442	1,720	1,600
86 SOUTHERN ILLINOIS UNIV AT CARBONDALE	1,044	1,127	1,288	1,289	1,505	1,588
87 WESTERN MICHIGAN UNIVERSITY	1,365	1,491	1,381	1,482	1,468	1,562
88 UNIVERSITY OF NEW MEXICO	1,432	1,442	1,540	1,456	1,533	1,556
89 CARNEGIE-MELLON UNIVERSITY	1,093	1,081	1,144	1,198	1,419	1,535
90 OKLAHOMA STATE UNIVERSITY	1,301	1,443	1,479	1,427	1,439	1,529
TOTAL, 1ST 90 INSTS.	227,427	230,848	237,113	238,945	244,272	252,568
91 UNIVERSITY OF CALIF AT SAN DIEGO	1,159	1,210	1,241	1,303	1,404	1,528
92 JOHNS HOPKINS UNIVERSITY	1,498	1,424	1,493	1,395	1,512	1,528
93 UNIVERSITY OF PUERTO RICO - RIO PIEDRAS	1,041	1,031	1,228	1,382	1,385	1,490
94 CATHOLIC UNIVERSITY OF AMERICA	1,719	1,713	1,577	1,630	1,480	1,452
95 WASHINGTON UNIVERSITY	1,339	1,301	1,095	1,265	1,332	1,439
96 KANSAS STATE UNIV OF AGR & APPLIED SCI	1,249	1,266	1,331	1,377	1,345	1,409
97 UNIVERSITY OF CALIF AT IRVINE	1,142	1,163	1,178	1,175	1,282	1,401
98 UNIVERSITY OF AKRON	998	1,061	1,132	1,225	1,337	1,398
99 WASHINGTON STATE UNIVERSITY	1,454	1,374	1,367	1,411	1,440	1,386
100 NEW SCHOOL FOR SOCIAL RESEARCH	1,653	1,923	1,726	1,585	1,529	1,381
TOTAL, 1ST 100 INSTS.	240,679	244,314	250,481	252,693	258,318	266,980
TOTAL, ALL OTHER INSTS.	99,272	102,482	107,582	110,375	113,704	117,223

NOTE: INCLUDES MEDICAL SCHOOLS
SOURCE: NATIONAL SCIENCE FOUNDATION, SRS.

TABLE 23. -- GRADUATE SCIENCE/ENGINEERING ENROLLMENT IN DOCTORATE-GRANTING INSTITUTIONS BY MAJOR FIELD, RANKED BY TOTAL GRADUATE SCIENCE/ENGINEERING ENROLLMENT: 1986

INSTITUTIONAL RANKING	TOTAL	ENGI-NEERING	PHYSICAL SCIENCES	ENVIRON-MENTAL SCIENCES	MATH SCIENCES	COMPUTER SCIENCES	LIFE SCIENCES	PSYCHOL-OGY	SOCIAL SCIENCES
TOTAL, ALL INSTITUTIONS	384,203	97,032	30,602	14,065	15,678	25,352	95,918	30,759	74,797
1 UNIVERSITY OF SOUTHERN CALIFORNIA	8,213	4,994	148	89	83	371	456	107	1,965
2 UNIVERSITY OF MINNESOTA	5,775	1,128	371	76	235	326	1,850	717	1,072
3 UNIVERSITY OF CALIF AT BERKELEY	5,549	1,755	678	132	300	200	1,233	118	1,133
4 OHIO STATE UNIVERSITY	5,360	1,200	420	196	290	235	1,574	251	1,194
5 UNIVERSITY OF WISCONSIN - MADISON	5,229	1,026	500	376	300	209	1,634	358	826
6 UNIV OF TEXAS AT AUSTIN	4,980	1,556	620	188	152	259	669	462	1,074
7 UNIVERSITY OF ILLINOIS - URBANA	4,873	1,435	632	78	209	394	1,074	188	863
8 UNIVERSITY OF MICHIGAN	4,727	2,053	298	293	170	0	904	226	783
9 MASSACHUSETTS INSTITUTE OF TECHNOLOGY	4,567	2,750	512	138	128	189	253	44	553
10 GEORGE WASHINGTON UNIVERSITY	4,372	3,027	37	24	248	0	308	173	555
TOTAL, 1ST 10 INSTS.	53,645	20,924	4,216	1,590	2,115	2,183	9,955	2,644	10,018
11 RUTGERS THE STATE UNIVERSITY	4,359	842	476	209	203	295	1,054	201	1,079
12 UNIVERSITY OF PITTSBURGH	4,215	851	300	86	98	319	1,345	81	1,135
13 UNIVERSITY OF CALIF AT LOS ANGELES	4,201	1,019	446	180	111	231	1,396	205	613
14 UNIVERSITY OF WASHINGTON	4,148	1,028	345	231	158	130	1,445	129	682
15 PENNSYLVANIA STATE UNIVERSITY	4,129	1,528	419	249	125	133	850	234	591
16 STANFORD UNIVERSITY	4,049	2,222	328	170	223	382	334	50	340
17 TEXAS A & M UNIVERSITY	4,019	1,115	368	373	85	134	1,270	213	461
18 UNIVERSITY OF ARIZONA	3,833	861	472	503	92	321	1,031	68	485
19 PURDUE UNIVERSITY	3,764	1,450	466	96	205	120	937	224	266
20 CORNELL UNIVERSITY	3,673	1,002	393	84	171	99	1,072	68	784
TOTAL, 1ST 20 INSTS.	94,035	32,842	8,229	3,771	3,586	4,347	20,689	4,117	16,454
21 VIRGINIA POLYTECHNIC INST AND STATE UNI	3,559	1,895	187	167	136	127	579	199	269
22 UNIVERSITY OF MARYLAND - COLLEGE PARK	3,515	1,074	402	162	210	247	583	140	697
23 UNIVERSITY OF COLORADO	3,430	849	390	159	141	146	796	172	777
24 MICHIGAN STATE UNIVERSITY	3,315	463	304	116	173	121	1,169	161	808
25 UNIVERSITY OF FLORIDA	3,305	981	278	64	110	122	1,190	177	383
26 HARVARD UNIVERSITY	3,274	614	323	41	71	0	891	69	1,265
27 NEW YORK UNIVERSITY	3,220	0	191	65	170	150	764	466	1,414
28 COLUMBIA UNIVERSITY MAIN DIVISION	3,156	869	216	101	73	178	837	39	843
29 FLORIDA INSTITUTE OF TECHNOLOGY	3,139	295	81	69	37	327	33	162	2,135
30 SUNY - BUFFALO	3,097	766	268	42	96	137	853	301	634
TOTAL, 1ST 30 INSTS.	127,045	40,648	10,869	4,757	4,803	5,902	28,384	6,003	25,679
31 NORTH CAROLINA STATE UNIV AT RALEIGH	2,964	1,255	127	84	198	92	773	136	299
32 BOSTON UNIVERSITY	2,908	434	132	27	49	81	1,032	186	967
33 UNIVERSITY OF ILLINOIS AT CHICAGO	2,801	845	204	33	229	0	946	97	447
34 UNIVERSITY OF TENNESSEE AT KNOXVILLE	2,797	831	173	64	77	123	677	226	626
35 UNIV OF NORTH CAROLINA AT CHAPEL HILL	2,757	32	239	187	114	103	1,344	109	629
36 UNIVERSITY OF CALIF AT DAVIS	2,744	547	202	70	86	128	1,372	31	308
37 ARIZONA STATE UNIVERSITY	2,729	1,026	180	65	50	216	400	96	696
38 IOWA STATE UNIVERSITY OF SCI & TECH	2,619	677	336	45	181	97	774	92	417
39 UNIVERSITY OF MASSACHUSETTS AT AMHERST	2,617	625	314	90	64	163	815	115	431
40 NORTHEASTERN UNIVERSITY	2,615	1,506	188	0	70	125	353	44	329
TOTAL, 1ST 40 INSTS.	154,596	48,426	12,964	5,422	5,921	7,030	36,870	7,135	30,828
41 GEORGIA INSTITUTE OF TECHNOLOGY	2,554	1,873	158	67	48	255	33	53	67
42 UNIVERSITY OF CINCINNATI	2,517	904	219	75	57	0	669	186	407
43 INDIANA UNIVERSITY	2,513	39	316	119	137	166	1,024	109	603
44 UNIVERSITY OF PENNSYLVANIA	2,510	619	283	21	39	218	386	55	889
45 WAYNE STATE UNIVERSITY	2,491	681	215	9	41	161	808	199	377
46 UNIVERSITY OF OKLAHOMA	2,382	707	132	124	45	0	808	50	516
47 SUNY - STONY BROOK	2,380	271	292	172	195	99	512	181	658
48 UNIVERSITY OF CONNECTICUT	2,355	404	139	49	84	107	806	210	556
49 UNIVERSITY OF IOWA	2,354	433	150	49	219	90	744	47	622
50 SYRACUSE UNIVERSITY	2,351	862	197	29	88	227	222	130	596
TOTAL, 1ST 50 INSTS.	179,003	55,219	15,065	6,136	6,874	8,353	42,882	8,355	36,119

CONTINUED ON NEXT PAGE.

TABLE 23. -- GRADUATE SCIENCE/ENGINEERING ENROLLMENT IN DOCTORATE-GRANTING INSTITUTIONS BY MAJOR FIELD, RANKED BY TOTAL GRADUATE SCIENCE/ENGINEERING ENROLLMENT: 1986

- CONTINUED

INSTITUTIONAL RANKING	TOTAL	ENGI-NEERING	PHYSICAL SCIENCES	ENVIRON-MENTAL SCIENCES	MATH SCIENCES	COMPUTER SCIENCES	LIFE SCIENCES	PSYCHOL-OGY	SOCIAL SCIENCES
51 POLYTECHNIC UNIVERSITY	2,324	1,430	180	0	34	672	0	0	8
52 SAN DIEGO STATE UNIVERSITY	2,280	346	126	43	205	0	741	124	695
53 UNIV OF TEXAS AT ARLINGTON	2,198	835	107	63	58	207	241	34	653
54 UNIVERSITY OF UTAH	2,185	546	230	91	71	78	566	70	533
55 NEW JERSEY INSTITUTE OF TECHNOLOGY	2,162	1,299	0	0	17	786	0	0	60
56 UNIVERSITY OF SOUTH CAROLINA	2,136	312	186	137	106	101	537	117	640
57 UNIVERSITY OF MISSOURI - COLUMBIA	2,067	529	96	61	56	0	664	117	544
58 UNIVERSITY OF KANSAS	2,049	360	104	55	39	80	729	267	415
59 TEXAS WOMAN'S UNIVERSITY	1,976	18	7	0	123	0	1,576	220	32
60 UNIVERSITY OF HAWAII AT MANOA	1,967	152	105	134	17	58	695	98	708
TOTAL, 1ST 60 INSTS.	200,347	61,046	16,206	6,720	7,600	10,335	48,631	9,402	40,407
61 CASE WESTERN RESERVE UNIVERSITY	1,947	551	131	8	92	68	616	38	443
62 UNIVERSITY OF LOWELL	1,932	921	231	59	237	242	169	45	28
63 CUNY GRADUATE SCHOOL AND UNIV CENTER	1,921	111	263	0	77	0	365	546	559
64 LOUISIANA STATE UNIVERSITY SYSTEM	1,908	474	163	125	79	51	667	107	242
65 UNIVERSITY OF KENTUCKY	1,899	266	109	42	79	67	628	110	598
66 UNIVERSITY OF HOUSTON-UNIVERSITY PARK	1,895	693	204	183	47	225	171	165	207
67 UNIVERSITY OF WISCONSIN - MILWAUKEE	1,884	395	125	55	44	77	276	289	623
68 YALE UNIVERSITY	1,870	176	257	46	63	66	737	107	418
69 UNIVERSITY OF VIRGINIA	1,848	549	201	65	61	116	397	78	381
70 RENSSELAER POLYTECHNIC INSTITUTE	1,841	1,208	184	26	115	170	22	34	82
TOTAL, 1ST 70 INSTS.	219,292	66,390	18,074	7,329	8,494	11,417	52,679	10,921	43,988
71 STEVENS INSTITUTE OF TECHNOLOGY	1,828	529	177	0	26	1,096	0	0	0
72 COLORADO STATE UNIVERSITY	1,809	380	135	141	81	53	733	112	174
73 OREGON STATE UNIVERSITY	1,797	435	135	146	105	102	759	0	115
74 LONG ISLAND UNIVERSITY	1,760	0	35	0	25	75	1,025	293	307
75 COLUMBIA UNIVERSITY TEACHERS COLLEGE	1,758	0	0	0	223	0	668	782	85
76 NORTHWESTERN UNIVERSITY	1,740	520	180	28	42	165	407	130	268
77 TEMPLE UNIVERSITY	1,693	0	94	19	112	315	352	164	637
78 UNIVERSITY OF GEORGIA	1,691	15	102	40	79	41	734	142	518
79 VIRGINIA COMMONWEALTH UNIVERSITY	1,671	167	51	0	43	0	615	152	643
80 SANTA CLARA UNIVERSITY	1,665	1,073	0	0	17	480	0	95	0
TOTAL, 1ST 80 INSTS.	236,704	69,509	18,983	7,723	9,247	13,744	57,972	12,791	46,735
81 ILLINOIS INSTITUTE OF TECHNOLOGY	1,636	682	96	0	18	517	136	130	57
82 WEST VIRGINIA UNIVERSITY	1,629	283	68	140	101	0	609	57	371
83 UNIVERSITY OF CHICAGO	1,625	0	318	41	87	20	270	116	773
84 FLORIDA STATE UNIVERSITY	1,604	0	150	146	88	91	203	114	812
85 AMERICAN UNIVERSITY	1,600	0	103	0	172	227	60	69	969
86 SOUTHERN ILLINOIS UNIV AT CARBONDALE	1,588	191	84	63	30	68	557	130	465
87 WESTERN MICHIGAN UNIVERSITY	1,562	67	33	38	73	137	159	117	938
88 UNIVERSITY OF NEW MEXICO	1,556	427	155	70	63	109	239	81	412
89 CARNEGIE-MELLON UNIVERSITY	1,535	644	121	0	87	144	38	21	480
90 OKLAHOMA STATE UNIVERSITY	1,529	531	113	58	93	99	357	66	212
TOTAL, 1ST 90 INSTS.	252,568	72,334	20,224	8,279	10,059	15,156	60,600	13,692	52,224
91 UNIVERSITY OF CALIF AT SAN DIEGO	1,528	361	286	180	107	0	284	51	259
92 JOHNS HOPKINS UNIVERSITY	1,528	168	70	48	49	0	883	74	236
93 UNIVERSITY OF PUERTO RICO - RIO PIEDRAS	1,490	0	126	0	55	0	190	186	933
94 CATHOLIC UNIVERSITY OF AMERICA	1,452	303	71	0	10	0	328	119	621
95 WASHINGTON UNIVERSITY	1,439	370	115	32	40	97	562	79	144
96 KANSAS STATE UNIV OF AGR & APPLIED SCI	1,409	244	104	22	71	86	591	132	159
97 UNIVERSITY OF CALIF AT IRVINE	1,401	596	169	0	40	85	224	32	255
98 UNIVERSITY OF AKRON	1,398	424	286	48	34	0	278	83	245
99 WASHINGTON STATE UNIVERSITY	1,386	273	91	88	39	53	536	62	244
100 NEW SCHOOL FOR SOCIAL RESEARCH	1,381	0	0	0	0	0	0	454	927
TOTAL, 1ST 100 INSTS.	266,980	75,073	21,542	8,697	10,504	15,477	64,476	14,964	56,247
TOTAL, ALL OTHER INSTS.	117,223	21,959	9,040	5,368	5,174	9,875	31,442	15,795	18,550

NOTE: INCLUDES MEDICAL SCHOOLS
SOURCE: NATIONAL SCIENCE FOUNDATION, SRS.

TABLE 24. -- SCIENCE/ENGINEERING POSTDOCTORATES
IN DOCTORATE-GRANTING INSTITUTIONS BY FIELD: 1980-86

FIELD	NUMBER							AVERAGE ANNUAL PERCENT CHANGE		
	1980	1981	1982	1983	1984	1985	1986	1980-85	1985-86	1980-86
TOTAL, ALL FIELDS	18,411	19,646	19,366	20,761	21,587	22,598	24,136	4.2	6.8	4.6
ENGINEERING	978	1,040	978	1,102	1,195	1,349	1,420	6.6	5.3	6.4
AEROSPACE	20	14	25	32	42	51	48	20.6	-5.9	15.7
AGRICULTURAL	9	9	6	4	8	15	17	10.8	13.3	11.2
BIOMEDICAL	28	34	31	28	34	47	52	10.9	10.6	10.9
CHEMICAL	183	171	174	198	245	273	295	8.3	8.1	8.3
CIVIL	124	107	108	131	146	122	140	-.3	14.8	2.0
ELECTRICAL	121	191	176	174	171	176	172	7.8	-2.3	6.0
ENGINEERING SCIENCE	79	87	76	71	63	90	73	2.6	-18.9	-1.3
INDUSTRIAL	16	13	9	14	22	20	29	4.6	45.0	10.4
MECHANICAL	137	130	130	182	196	202	239	8.1	18.3	9.7
METALLURGICAL/MATERIALS	172	193	166	204	168	245	249	7.3	1.6	6.4
MINING	3	16	10	19	18	19	25	44.7	31.6	42.4
NUCLEAR	22	26	18	15	19	31	31	7.1	.0	5.9
PETROLEUM	6	2	4	1	4	6	1	.0	-83.3	-25.8
ENGINEERING, N.E.C.	58	47	45	29	59	52	49	-2.2	-5.8	-2.8
SCIENCES, TOTAL	17,433	18,606	18,388	19,659	20,392	21,249	22,716	4.0	6.9	4.5
PHYSICAL SCIENCES	4,264	4,462	4,281	4,444	4,386	4,517	4,813	1.2	6.6	2.0
ASTRONOMY	141	132	148	111	118	138	133	-.4	-3.6	-1.0
CHEMISTRY	2,710	2,870	2,805	2,973	2,906	2,995	3,151	2.0	5.2	2.5
PHYSICS	1,398	1,445	1,326	1,350	1,320	1,342	1,497	-.8	11.5	1.1
PHYSICAL SCIENCES, N.E.C.	15	15	2	10	42	42	32	22.9	-23.8	13.5
ENVIRONMENTAL SCIENCES	308	339	335	415	488	375	418	4.0	11.5	5.2
ATMOSPHERIC SCIENCES	43	46	32	41	74	48	43	2.2	-10.4	.0
GEOSCIENCES	194	213	216	237	250	226	247	3.1	9.3	4.1
OCEANOGRAPHY	57	67	78	120	151	79	98	6.7	24.1	9.5
ENVIRONMENTAL SCIENCES, N.E.C.	14	13	9	17	13	22	30	9.5	36.4	13.5
MATHEMATICAL SCIENCES	162	113	194	170	203	226	201	6.9	-11.1	3.7
COMPUTER SCIENCES	43	34	46	82	63	74	74	11.5	.0	9.5
LIFE SCIENCES	11,743	12,855	12,725	13,756	14,473	15,191	16,328	5.3	7.5	5.6
AGRICULTURAL SCIENCES	239	284	279	295	358	357	388	8.4	8.7	8.4
BIOLOGICAL SCIENCES	7,106	7,706	7,756	8,386	8,740	9,229	9,857	5.4	6.8	5.6
ANATOMY	237	248	261	284	282	310	342	5.5	10.3	6.3
BIOCHEMISTRY	1,599	1,724	1,684	1,765	1,803	1,892	2,027	3.4	7.1	4.0
BIOLOGY	989	870	942	1,014	1,127	1,128	1,109	2.7	-1.7	1.9
BIOMETRY/EPIDEMIOLOGY	72	64	53	54	67	59	99	-3.9	67.8	5.5
BIOPHYSICS	151	155	129	183	121	101	133	-7.7	31.7	-2.1
BOTANY	220	240	298	369	347	371	394	11.0	6.2	10.2
CELL BIOLOGY	410	532	516	653	648	731	827	12.3	13.1	12.4
ECOLOGY	22	44	28	39	36	37	37	11.0	.0	9.1
ENTOMOLOGY/PARASITOLOGY	119	133	119	112	113	139	143	3.2	2.9	3.1
GENETICS	258	298	314	344	382	377	428	7.9	13.5	8.8
MICROBIOLOGY	873	967	1,014	1,025	1,071	1,168	1,274	6.0	9.1	6.5
NUTRITION	129	171	138	150	150	202	185	9.4	-8.4	6.2
PATHOLOGY	477	468	540	584	607	621	709	5.4	14.2	6.8
PHARMACOLOGY	624	755	777	801	816	861	885	6.7	2.8	6.0
PHYSIOLOGY	668	758	673	754	817	840	906	4.7	7.9	5.2
ZOOLOGY	193	207	203	183	157	212	217	1.9	2.4	2.0
BIOSCIENCES, N.E.C.	65	72	67	72	196	180	142	22.6	-21.1	13.9
HEALTH SCIENCES	4,398	4,865	4,690	5,075	5,375	5,605	6,083	5.0	8.5	5.6
DENTISTRY	79	139	246	197	186	224	127	23.2	-43.3	8.2
NEUROLOGY	283	287	254	301	352	332	419	3.2	26.2	6.8
NURSING	9	8	0	6	14	17	16	13.6	-5.9	10.1
PHARMACEUTICAL SCIENCES	233	243	238	241	269	318	384	6.4	20.8	8.7
PREVENTIVE MEDICINE/ COMMUNITY HEALTH	161	135	143	142	168	167	194	.7	16.2	3.2
SPEECH PATHOLOGY/AUDIOLOGY	18	19	10	18	18	18	12	.0	-33.3	-6.5
VETERINARY SCIENCES	52	31	49	50	78	69	100	5.8	44.9	11.5
CLINICAL MEDICINE, N.E.C.	3,461	3,890	3,658	4,004	4,172	4,322	4,652	4.5	7.6	5.1
HEALTH RELATED, N.E.C.	102	113	92	116	118	138	179	6.2	29.7	9.8
PSYCHOLOGY	475	471	520	435	422	498	526	1.0	5.6	1.7
SOCIAL SCIENCES	438	332	287	357	357	368	356	-3.4	-3.3	-3.4
AGRICULTURAL ECONOMICS	8	6	10	28	18	31	35	31.1	12.9	27.9
ANTHROPOLOGY	40	30	34	60	57	57	52	7.3	-8.8	4.5
ECONOMICS (EXCEPT AGRICULTURAL)	146	30	13	20	26	19	22	-33.5	15.8	-27.1
GEOGRAPHY	15	23	5	7	14	10	11	-7.8	10.0	-5.0
HISTORY AND PHILOSOPHY OF SCIENCE	15	21	14	19	12	11	11	-6.0	.0	-5.0
LINGUISTICS	54	47	47	51	30	26	25	-13.6	-3.8	-12.0
POLITICAL SCIENCE	30	46	44	43	31	44	66	8.0	50.0	14.0
SOCIOLOGY	99	90	89	99	114	92	84	-1.5	-8.7	-2.7
SOCIOLOGY/ANTHROPOLOGY	3	0	2	1	0	2	1	-7.8	-50.0	-16.7
SOCIAL SCIENCES, N.E.C.	28	39	29	29	55	74	49	22.1	-35.5	9.8

SOURCE: NATIONAL SCIENCE FOUNDATION, SRS.